

“The future of GI endoscopy...where are we going?”



Authors

Ian Mark Gralnek^{1,2}, Mário Dinis-Ribeiro^{3,4}, Cesare Hassan^{5,6}, Raf Bisschops⁷ 

Institutions

- 1 Gastroenterology, Emek Medical Center, Afula, Israel
- 2 Technion Israel Institute of Technology The Ruth and Bruce Rappaport Faculty of Medicine, Haifa, Israel
- 3 Gastroenterologia, Porto Comprehensive Cancer Center (Porto.CCC) & RISE@CI-IPOP (Health Research Network), Porto, Portugal, Porto, Portugal
- 4 MEDCIDS, Porto Faculty of Medicine, Porto, Portugal
- 5 Department of Biomedical Sciences, Humanitas University, Milan, Italy
- 6 Endoscopy Unit, IRCCS Humanitas Clinical and Research Center, Milan, Italy
- 7 Department of Gastroenterology and Hepatology, University Hospital Leuven, Leuven, Belgium

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Corresponding author

Prof. Ian Mark Gralnek, MD, MSHS, Emek Medical Center, Gastroenterology, Afula, Israel , 18101 Afula, Israel
ian_gr@clalit.org.il

Over the past year, in these special monthly articles celebrating 60 years of ESGE, you have heard from each of the ESGE Committees and Working Groups and our GI endoscopy nursing partner ESGENA detailing the past and providing a roadmap for the future of ESGE. We have included perspectives from those currently leading our society on how ESGE will continue to serve the endoscopy community through our guidelines, educational programs, endoscopic research, curricula, and training. You have also heard from our young endoscopists and how ESGE will keep an “EYE” on the future, including the growing diversity of our community and ESGE’s commitment to advancing “green” endoscopy. In this final special monthly article celebrating the 60th anniversary of ESGE (► **Fig. 1**), we look into our proverbial crystal ball and provide our thoughts about the “future of endoscopy”.

ESGE strongly believes the future of GI endoscopy looks bright and exciting. During the next 10 years we will see further technological advancements as well as further refinements in endoscopic techniques that will positively impact and advance patient care. This includes that endoscopy will continue to be a significant and relevant procedure in the care of an aging population with complex medical histories and diseases from obesity to cancer.

But what does all this really mean?

GI endoscopy will continue to push the interventional envelope with organ preserving procedures to avoid surgery, both laparoscopic and conventional. This will include further advancements and techniques for EUS guided drainage procedures, EUS ablative techniques (e. g., pancreatic EUS RFA), full thickness resections of dysplastic/malignant lesions and post operative endoscopic repair of surgical adverse events.

The burgeoning field of bariatric/metabolic endoscopy will continue to grow and will further challenge bariatric “surgery” as a procedure of choice for obesity. There will be additional and more “user friendly” endoscopic bariatric technologies and techniques that will allow the everyday endoscopist, and not just interventional endoscopists, to perform bariatric/metabolic endoscopy. The exact role of endoscopic bariatric procedures in comparison to or in combination with emerging pharmacological treatment option for obesity also will require further exploration.

Artificial intelligence (AI) will continue to advance and will become part and parcel of GI endoscopy as this technology will be embedded in the software of our endoscope platforms. Compared to where it is today, the scope (pun intended) and complexity of AI will go far beyond merely polyp detection. AI will allow for accurate polyp/tissue characterization, polyp



► **Fig. 1** ESGE 60th Anniversary Jubilee.

sizing, provide recommendations as to what resection technique to use and will also tell us whether our resection was adequate. Moreover, AI will largely replace the current chromoendoscopy techniques (both using vital stains and/or electronic/virtual chromoendoscopy techniques such as narrow band imaging) for evaluating our IBD patients as well as Barrett's esophagus for dysplasia and early cancer detection. AI will also facilitate the endoscopist's daily life by assisting with automated reporting and logistic planning of endoscopic procedures.

Robotic endoscopy will continue to be developed for endoscopic tissue resection and other endoscopic interventions, yet issues regarding capital equipment costs, maintenance costs and whether this technology performs significantly better than current techniques will need to be evaluated before routine uptake will occur.

All endoscopic procedural developments and advances will require a balance in terms of costs, effectiveness, societal impact, and sustainability issues.

Moreover, there will be an ongoing increase in both gender and ethnic diversity in GI endoscopy, highlighted by an ever-increasing number of women in endoscopy and with this, more women leading endoscopy focused societies. With this, we will see endoscope platforms take note and develop more "personalized" endoscopes with handles that can be adjusted for varying hand size and grip strength. Gender will also lead

to more attention being paid to the ergonomics of endoscopy and the future design of endoscopy suites.

Last, in the coming ten years, we fully believe that ESGE will continue to grow its community/membership...not only in Europe but worldwide. As stated in ESGE's mission statement, ESGE will continue to educate, innovate, disseminate, support and promote quality in the practice of GI endoscopy. Moreover, ESGE will continue to play a global leading role in setting standards of care in GI endoscopy and how these standards will be incorporated into guidelines and health care policies!

We hope you have enjoyed these 12 special articles during 2024!

Last, but not least, a very happy 60th birthday to ESGE and here's to the next 60 wonderful years!

Ian M. Gralnek (President of ESGE 2023–2025)

Mario Dinis-Ribeiro (President of ESGE 2019–2021, Editor of this special series)

Cesare Hassan (President-elect ESGE)

Raf Bisschops (Secretary General ESGE)

Conflict of Interest

The authors declare that they have no conflict of interest.