

Cleaning and Disinfection in Europe according to the Endoscopic Societies' Guidelines



ESGE (European Society of Gastrointestinal Endoscopy)

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As cleaning and disinfection is a very important topic for endoscopy units and as many patients ask how endoscopists try to prevent the nosocomial risk posed by the endoscope, the ESGE, in 1993, organized a Guidelines Committee on this important subject.

The ESGE Guidelines Committee recently asked all national ESGE Member Societies to provide it with their current cleaning and disinfection standards and guidelines. Their reply gives us a good idea of how responsible all national Member Societies are when it comes to cleaning and disinfection, while also showing us the technical differences, linked to the financial and technical

possibilities available, that exist between the individual member states.

Please also refer to the Technical Note on Cleaning and Disinfection published by the ESGE Guidelines Committee in this issue of the Endoscopy Journal.

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Bibliography

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ESGE member society questionnaire

ESGE member	Current cleaning and disinfection practices in your country: ESGE Guideline or more stringent guideline?	Whether PAA or other disinfectants than GA are being used for cleaning and disinfection and, if so, whether you have noticed an increase in repair or other dramatic side effects for the endoscope.
Austria: Endoscopic group of the Austrian Society of Gastroenterology <i>Secretary General:</i> Dr. F. Schreiber	ESGE Guidelines (update in 1999). There are no more stringent guidelines but I want to stress that there has been an increasing trend to implement single use accessories.	For manual disinfection which is still used (mainly in the private field) and is not banned by the recommendation of the Austrian society only 2% GA permitted and it used without any dramatic side effects for the endoscopes. No other disinfectants in use.
Belgium: Belgian Society of Digestive Endoscopy <i>Secretary General:</i> Dr. Hans Van Vlierberghe	ESGE Guidelines	Only GA used in Vlierberghe's department
Bosnia and Herzegovina: Prof. Mehmed Gribajcevic	ESGE Guidelines: Washing machine procedure with Olympus Cleaner detergent based on enzymes and ETD disinfectants, as well as disinfecting the equipment with GA.	Until, no increase in damage of equipment in conjunction with the use of GA noticed. On the contrary, increased damage was noticed with washing machine procedure.
Croatia: Croatian Society of GI Endoscopy <i>President:</i> Prof. Roland Pulanic	Society has been trying to implement the ESGE Guidelines for endoscope and accessories in Croatia. Most hospitals adhere to these guidelines.	Based on the data collected from 18 Croatian hospitals and clinics, the situation is as follows: a. ETD 2 and ETD 2+ thermo-disinfection are used in 5 hospitals; b. mechanical cleaning is applied in the remaining 13 hospitals: Gigasept (succine dialdehyde, Schulke, Mayer, Germany) is used for this purpose in 5 hospitals, without any observed damage to the endoscope or accessories; Cidex OPA and Cidezime (enzymatic detergent) are used in other 5 hospitals and were observed to dye the laundry, also a slight film on endoscopes has been noticed in 2 hospitals; Endoplival (GA, Pliva, Croatia) is applied in 3 hospitals, and endoscope valve blockage has been reported in 1 of them; c. frequent failures of the forceps by Olympus and Pentax have been observed to occur after cleaning.
Czech Republic: Czech Gastroenterological Society Dr. Miroslav Zavoral	Suggested guidelines include mechanical cleaning, using enzymatic detergent (Cidezime) and disinfection based on the GA (ETD disinfectors, Olympus Keymed Mobile Mechanical Disinfectors – Olympus GA based solution, or Cidex).	GA only, so no decrease in life span or increase in repairs noted. Peracetic acid is not used as far as I know.
Denmark: Danish Society of Gastrointestinal Endoscopy <i>President:</i> Dr. Peter Vilmann	Current cleaning and disinfection practices are written in a folder, distributed to hospitals and practising specialists in Denmark. The guidelines have been made by an expert council joined by the endoscopic committee of Aksel Kruse. The guidelines are officially produced by the National Institute of Infectious Disease and the Central Department of Cleaning and Disinfection of Hospitals. According to the guidelines manual disinfection of endoscopes should be entirely avoided. I am unaware of any registration which can tell us, who follows these guidelines and who does not. However, my feeling is that all hospitals in Denmark follow the guidelines. And practising gastroenterologists – at least some – are still performing a manual cleaning of the endoscope.	I have no information on increasing repair or other side effects for the endoscopes when peracetic acid or other disinfectants than glutaraldehyde are being used, however, this is nothing that our own nurses report on – those of whom still remember the time when we had to disinfect the endoscopes manually.
Finland: Finnish Society of Gastroenterology <i>Secretary General:</i> Professor Markku Heikkinen	Similar guidelines as ESGE	Only Glutaraldehyde used
France: French Society of Digestive Endoscopy <i>President:</i> Professor Thierry Ponchon	ESGE/French Guidelines practically identical except biopsy forceps have to be single use. Future guidelines could be more stringent: double cleaning, peracetic acid, etc.	Increase in repair of endoscopes probably caused by use of PAA. SFED has set up registry to evaluate consequences.

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ESGE member	Current cleaning and disinfection practices in your country: ESGE Guideline or more stringent guideline?	Whether PAA or other disinfectants than GA are being used for cleaning and disinfection and, if so, whether you have noticed an increase in repair or other dramatic side effects for the endoscope.
<p>Germany: Endoscopic Section of the German Society of Gastroenterology President: Professor Michael Jung Secretary General: Professor Thomas Rösch</p>	<p>For Germany commonly the DGKH (Deutsche Gesellschaft für Krankenhaushygiene – German Association of hospital hygiene) guidelines and the RKI (Robert Koch Institute) recommendations apply. The DGKH guidelines basically regulate the in vitro microbiological test methods and requirements an automated washer disinfectant has to fulfil. The hospital hygienist usually will ask for this microbiological approval by an test institute prior purchase an equipment. As far as we experienced are the test methods and requirements in Germany, Scandinavia, Austria, Switzerland and France very similar. The RKI recommendations have to be understood as recommendations and describe the proper procedure of manual and automated reprocessing of an endoscope. The recommendations are comparable with the ESGE guidelines.</p>	<p>Aldehydes (GA) are the most used disinfectant in manual and automated reprocessing systems. Alternatives to the aldehydes are quaternary ammonium derivatives and glucoprotamines available for manual disinfection. Allergic problems and damages to endoscopes with these substances have not been reported. Now the quaternary ammonium derivatives are also available for automated reprocessing (thermo-chemical disinfection). – Thermosept AF (Schalke & Mayer), Thermoton Endo (Dr. Schumacher). Following the expert opinion, these products have no sporicidy and no efficacy against Polio. PAA is available for manual reprocessing (Sekusept aktiv from Henkel is a granules which have to be dissolved in water). A minority of departments use these chemicals (problem: the granules do not dissolve so easily and this lead to obstruction of endoscope channels). Preliminary test with PAA in machines showed compatibility problems especially when endoscopes were reprocessed with GA over years before PAA was used.</p>
<p>Hungary: Endoscopic Section of the Hungarian Society of Gastroenterology President: Dr István Rác</p>	ESGE Guidelines	Only glutaraldehyde used in Hungary
<p>Italy: Italian Society of Digestive Endoscopy Secretary General: Professor Enrico Ricci</p>	All information is in Italian.	All information is in Italian.
<p>Lithuania: Lithuanian Society of Gastrointestinal Endoscopy Secretary General: Dr Nijolė Sileikienė</p>		Only glutaraldehyde
<p>Norway: Scandinavian Association of Digestive Endoscopy Secretary General: Dr Lars Aabakken</p>	ESGE Guidelines	Only glutaraldehyde
<p>Poland: Endoscopy Group of the Polish Association of Gastroenterology Member Society President, President elect ESGE: Professor Andrzej Nowak Secretary General: Dr Tomasz Marek</p>	<p>Endoscopes: Polish law (notification of general sanitary inspector) requires 60 minutes of soak in 2% alkaline GA at room temperature for achieving tuberculocidal activity. Such soak time is required by sanitary inspectors for disinfection of any kind of endoscopes (including bronchoscopy). The guidelines of the Polish Society of Gastroenterology, allow shortening of the disinfection time in 2% alkaline GA at room temperature to 20 minutes, when two criteria are fulfilled: – before disinfection the endoscope undergoes the standardized process of meticulous mechanical cleaning, and the patient – was free of any disease that is potentially transmittable by endoscopy (e.g. tuberculosis, viral infections, etc.) For any other disinfectant the guidelines of the PSG suggest strict compliance with the requirements of the notification of General Sanitary Inspector Accessories: The Polish guidelines for decontamination of endoscopic accessories are identical to ESGE guidelines.</p>	<p>Certainly GA is the disinfectant most frequently used for manual disinfection. PAA is used very rarely. Of course, disinfectants provided by manufacturers of disinfection machines are used for automated disinfection. We have noticed few cases of damage (puncture) of outer sheath of the scopes using Steris System 1 due to its incompatibility with Olympus Evis scopes (however, it was apparently the error of disinfection nurses). We have not used PAA long enough to observe any other scope damage. We have not received such reports from Endoscopy group members.</p>
<p>Portugal: Portuguese Society of Digestive Endoscopy Secretary General: Dr Bento Charrua</p>	SPED has recommendations about endoscopy cleaning and disinfection, (attached I send you a copy), which has been supplied to our members (on the Portuguese language)	There are few centres that use peracetic acid, and we, to this date, do not have any information about any accidents occurring in this regard.
<p>Romania: Romanian Society of Gastrointestinal Endoscopy President: Professor Oliviu Pascu</p>	Pre-cleaning with Cidezine (Enzymatic detergent) Disinfection with Cidex Opa (Johnson & Johnson)	For short period (6 months) Pera Safe (PAA) was used (Antec Int Euro-Medica Inc Group). No side effects noticed.

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Slovakia: Endoscopy Section of the Slovak Gastroenterological Society <i>Secretary General:</i> Dr Ladislav Kuzela	The guidelines (is issued by the Ministry of Health) are similar to the ESGE guidelines. Manual, half-automated and automated reprocessing are in use.	Only glutaraldehyde used
Slovenia: Slovenian Society of Gastrointestinal Endoscopy Stanka Popovic	Not up to standard	In assortment of different disinfectants I did not find Gigasept FF (formaldehyde-free). Majority of endoscopy units in undeveloped countries are functioning in very limited circumstances and with a few endoscopes only. For years they will not reach the European standard. Because of it they are using GIGASEPT FF (see enclosed documentation) as it is less irritating for staff than any other disinfectant on the list.
Switzerland: Swiss Society of Gastroenterology <i>President,</i> Dr U. Seefeld <i>Secretary General:</i> Dr J.P. Dederding	Swiss guidelines date from 1998. To a large extent they are based on the European guidelines. Before 1998, Swiss gastroenterologists applied internationally applicable norms. In 2003, the guidelines will be updated in order to take recent developments into account.	To our knowledge nobody uses PAA. So no damage has been reported. The problem posed by vCJD would suggest ceasing the use of glutaraldehyde, however, no official decision has been taken. There is an ever increasing move towards single use materials.
UK: Endoscopy Committee of the British Society of Gastroenterology <i>Secretary General:</i> Dr Ian Barrison	BSG currently rewriting guidelines to deal particularly with GA toxicity and the use of PAA. These guidelines will be available by January.	
Yugoslavia: Yugoslav Gastroenterological Endoscopy Association <i>Secretary General:</i> Dr Nenad Perisic	ESGE Guidelines	Glutaraldehyde used
Turkey: Turkish Society of Gastroenterology Endoscopy <i>President:</i> Sarita Ik, M. D.	ESGE Guidelines	Glutaraldehyde and lysoformine used. There is no reports of serious damage to the scopes related the use of these products