



endoNEWS

Best Practice: Processing of Endoscopes



Dear readers,

The pandemic has shown that working online offers more possibilities than we could have imagined two years ago. Online meetings and webinars are now a normal part of everyday life and have proved highly beneficial. Our last webinar also showed that a dialogue with experts is hugely important and provides opportunities to ask the questions that are on your mind. We provide an overview of this informative event on p. 1.

In an interview starting on p. 2, Mr Jalel Ben Mesmia, Head of CSSD at the University Hospital Schleswig-Holstein (UKSH), gives an illuminating account of his department's numerous tasks and how he meets the challenge of reaching a consistently high level of hygiene in the processing of flexible endoscopes at two hospital sites.

The new AKI brochure is now available. All important information on its content and scope is set out on p. 4. If you would like a printed copy, please contact your designated neodisher specialist advisor or us directly.

Enjoy the newsletter!

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Systematic Hygiene

Dr. Weigert Webinar: “Troubleshooting Endoscope Processing”

Selected chat questions & answers from the webinar

The DEGEA, IVEPA, SVEP and Dr. Weigert jointly held the webinar “Troubleshooting Endoscope Processing” in July 2021. Due to time constraints, it was not possible to answer all the questions posted in the chat box. We have answered a selection of questions for you here.

What is the recommendation for processing rinsing adapters that have been used in manual pre-cleaning or manual final disinfection?

U. Beilenhoff: To date, very few rinsing adapters are available as disposable systems. That would be the ideal gold standard that would make processing redundant and also reduce the risk of cross-contamination. A new adapter set could then be used for cleaning each endoscope, as with the disposable brushes. At present, the national and international guidelines do not contain any details on processing rinsing adapters. Therefore, the manufacturer's instructions must be followed. In the event of manual processing, the adapters are put into the disinfectant solution with the endoscope after cleaning and intermediate rinsing. The adapters are used to fill all channels with disinfectant solution, without bubbles. They then remain in the solution with the endoscope, ensuring that they are also disinfected.

If the endoscope is processed automatically in the endoscope washer-disinfector after the manual steps, there is the problem of cleaning and disinfecting these rinsing adapters. The manufacturer should draw up a corresponding processing recommendation for reusable adapters. It is always worth reading up on it or asking the manufacturer.



Not always routine:
Processing flexible endoscopes

The rinsing adapters can be configured in very different ways:

- If there are plug-in connections, similar to valves, processing in the endoscope washer-disinfector could be considered.
- Rinsing adapters made up of hose systems may have one or more channels/hoses.
- The hoses may have plug-in connectors between them, resulting in branching points.
- If the adapters have check valves, processing in the endoscope washer-disinfector may be difficult.

Processing can be performed manually or in the washer-disinfector. Processing in the endoscope washer-disinfector is not usually possible for rinsing adapters with hose systems, as they do not belong to the loading templates, and consequently their processing has not been validated either. In this case, manual

If you would like to watch the webinar again, it can be found here on the Dr. Weigert website:

<https://www.drweigert.com/de/aktuelles/hilfe-die-endoskopaufbereitung-laeuft-nicht-rund-fehlersuche-fehlerbeseitigung-und-notfallkonzepte-328>



cleaning and disinfection would have to be carried out in line with the manufacturer's instructions.

To what extent and at what intervals are staff training courses on processing prescribed? Is there any experience as to what is required by regulatory authorities?

U. Beilenhoff: The operator may employ only people with the relevant training and experience to process medical devices (German Medical Devices Operator Ordinance, MedPBetreibV). This is set out in detail in the Commission for Hospital Hygiene and Infection Prevention (KRINKO) guideline, Annex 6. However, the number of hours is not specified. Therefore, the German Society for Sterile Supply (DGSV) has developed an advanced training system of general and specialist courses and has now also created stand-alone vocational training as a specialist in medical device processing. General courses lasting 40 hours are offered. In the event of endoscope processing, specific endoscopy courses should always be used in order to obtain genuinely subject-specific knowledge.

Specialist courses lasting 120 hours are an opportunity to train unqualified staff. CSSD employees who are often deployed for endoscope processing usually receive the training in specialist courses. If these employees are now to process flexible endoscopes, they can receive specific refresher training on endoscope processing with a module covering 24 hours. General courses are also integrated in the advanced endoscopy training and the specialist qualification in gastroenterological endoscopy. Based on a German Medical Association module, the Association of German Gastroenterologists in Private Practice (bng) provides general courses lasting 24 hours specifically for the primary-care sector.

A periodic refresher makes perfect sense in a sensitive field like endoscopy. It is already required in the European directives and the S2 K guideline, but no durations are stipulated. The refresher courses are not yet explicitly required in the KRINKO guideline. However, they are offered throughout Germany. Authorities do check the level of training of endoscopy staff, including with regard to specialist knowledge.

How long can an endoscope be kept in the endoscope washer-disinfector in Austria before it has to be processed again?

G. Weilguny-Schöfl: According to the hospital hygiene regulations, the endoscopes must be fully dried out in a drying cabinet immediately after the end of the processing program in the endoscope washer-disinfector. If there is no drying cabinet available or if there is insufficient space, the endoscopes must be hung up in a dust-free cabinet without valves. I know that in practice, there is not always enough time to wait for the end of processing in the endoscope washer-disinfector, as otherwise overtime is incurred. However, the time-requirement calculation in an endoscopy department should incorporate a sufficient time frame for all subsequent work that arises.

Our experts:

Ulrike Beilenhoff, President of the German Society of Endoscopy Nurses and Associates (DEGEA), and Gerlinde Weilguny-Schöfl, Deputy President of the Austrian Society of Endoscopy Nurses and Associates (IVEPA).

Processing of Flexible Endoscopes at the University Hospital Schleswig-Holstein

Interview with Mr Jalel Ben Mesmia



Jalel Ben Mesmia is Head of CSSD at the University Hospital Schleswig-Holstein in Kiel. CSSD is responsible for the processing of flexible endoscopes at the Kiel and Lübeck sites. Mr Ben Mesmia was kind enough to talk to us about the processing of flexible endoscopes at the UKSH.

Mr Ben Mesmia, how many flexible endoscopes do you process each year in your unit? Do you sterilise certain types of endoscopes?

We process around 15,000 flexible endoscopes per year. To do this, we use seven endoscope washer-disinfectors, each of which processes about 2,000 endoscopes. In addition, there are the TEE probes that we also process in the endoscope washer-disinfectors. We have 244 endoscopes in total, including colonoscopes, gastroscopes, duodenoscopes, bronchoscopes, devices for endosonography and many others. The hygiene level normally attained is disinfection. Paediatric bronchoscopes are an exception. We sterilise these endoscopes by means of plasma sterilisation, as they are rarely used. After plasma sterilisation, the endoscopes are ready to be used for up to six months without having to be processed again.

How do you handle loaner endoscopes?

When a loaner endoscope is delivered, the endoscopy department sends this information to the instrument manager in CSSD. The instrument manager checks whether it is possible for us to process the product. If our documentation confirms this, he approves the endoscope. It is then entered into our system and can be processed. If we do not possess the required information on the endoscope, we request it from the manufacturer.

How is cooperation between CSSD and the endoscopy department organised?

The processing unit for flexible endoscopes is organisationally assigned to CSSD. However, the processing rooms are located in the endoscopy unit, thus ensuring short distances.

Five colleagues are dedicated to the processing of flexible endoscopes, carrying out processing from 7 a.m. to 7 p.m. If endoscopes have to be processed outside these hours, someone goes from CSSD to the endoscope processing room and processes the endoscopes promptly there (see Fig. 1). We have a total of 68 employees in CSSD. All employees have completed the specialist course, and 70% have also undergone general endoscopy training.



Fig. 1: Basins make pre-cleaning easy.

Why did you opt for peracetic acid as an agent?

This was a decision by the hygiene department, which preferred to use peracetic acid because of its effectiveness at lower temperatures and its lower tendency to fix proteins. When selecting the cleaning agent, we were keen to use the same cleaning agent in CSSD and the endoscopy department. This was possible with the cleaning agent neodisher® MediClean forte from Dr. Weigert. Like the disinfectant, the cleaning agent is supplied in 200-litre drums and conveyed to the endoscope washer-disinfectors via central dosing systems.

Why did you opt for a central dosing system at the time?

The central dosing system supplies all seven endoscope washer-disinfectors with disinfectant from a single drum. We were familiar with the benefits of central dosing from CSSD and wanted to use it in the endoscopy department, too. It makes our job much easier if just one drum has to be replaced, rather than frequently changing 5-litre canisters.

Specially trained employees can also be entrusted with replacement, thus minimising the risk of mix-ups. Mix-ups are additionally prevented by the use of RFID identification of the drums.



Fig. 2: A keg tap opens the disinfectant drum, meaning that the operator does not work with an open drum at any time.

We can also supply the cleaning agent to CSSD and to the endoscope washer-disinfectors in the endoscopy department from a single drum. Replacement of the cleaning-agent drum is carried out by a CSSD employee, while an employee of the endoscopy department replaces the disinfectant drum (see Fig. 2). This is necessary only every 1–2 months. We order the next drum straight after replacing a drum.

The drums are delivered in drum containers. These are moveable tanks. They can be easily moved into the dosing chamber and double as leakage protection (see Fig. 3).



Fig. 3: Drum containers allow the chemical drums to be moved easily and double as leakage protection.

How do you transport the endoscopes from the endoscopy room to the processing room?

The endoscopes are transported in tubs that are marked with green or red film.

What chemicals do you use to pre-clean the endoscopes?

We use neodisher® MediClean forte for pre-cleaning. It was very important to us to use the same cleaning agent in the processing of flexible endoscopes and for cleaning in CSSD.

How do you store the endoscopes? How long should the endoscopes be stored?

We hang the endoscopes in cabinets with good ventilation. The endoscopes are dried with compressed air before being hung in the cabinets. The endoscopes can be stored in the cabinet for a maximum of 14 days, and we then take them for renewed processing.

Do you use single-use valves? If so, why?

Yes, we use single-use valves to prevent risks when processing endoscopes. Unfortunately, the large number of endoscopes means that there are not suitable single-use valves for all endoscope models. In this case, we process the valves carefully in conjunction with the endoscope. The valves are stored in a basket with the endoscope until they are used again.

What is your contingency plan in endoscope processing?

Our contingency plan stems from the number of machines. We have seven endoscope washer-disinfectors in operation. They can quickly compensate for the failure of a single endoscope washer-disinfectors. In an extreme emergency, we could also resort to the endoscope washer-disinfectors of UKSH Lübeck.

The interview was conducted by Guido Merk.

Instrument Processing: Value-Retaining Processing of Flexible Endoscopes

New AKI brochure available in several languages

Forty-five years ago, a group of experts founded the Instrument Processing Working Group (AKI) with the aim of creating, consolidating and publishing “know-how” from the areas of development and manufacturing of medical devices, washer-disinfectors and sterilizers, process chemicals and their interaction during processing. Based on scientific findings and experience in the processing of reusable medical devices, practice-oriented assistance with a focus on preventive value retention has been developed and published.

Since the first publication of the brochure “Reprocessing of Instruments to Retain Value”, known as the “Red Brochure”, in 1979, more than 400 000 copies have been published worldwide in 20 languages. The “Red Brochure” is appreciated in many countries by users as well as for the training of staff in processing units for medical devices.

An important chapter of the “Red Brochure” deals with surface changes and damage to instruments observed during processing. Recommendations are given on how such damage can be avoided, whether changes that have occurred can be reversed with suitable measures or, alternatively, whether repair is necessary.

As part of a European conference on the processing of endoscopes in 2019, typical damage to flexible endoscopes during processing was presented in a session. It became apparent that in many cases the staff in the processing units have insufficient knowledge regarding the identification, interpretation and evaluation of damage to flexible endoscopes. The discussion led to the idea of developing a publication comparable to the Red Brochure that deals with the value-preserving processing of flexible endoscopes.

The result of the implementation of this idea, in which the AKI was supported by experts from leading endoscope manufacturers, is now available. The goal of this brochure is to give recommendations and guidance to processing staff for correct and reliable processing of flexible endoscopes so that their function and value can be retained for a long time.

The first issue of this brochure was presented for first time in four language versions (English, German, French, Spanish) to participants of the WFHSS congress in Geneva in November 2021. Additional language versions (Russian, Polish) will be available by the end of 2021.

All language versions of the brochure can be downloaded or ordered as a print copy from the AKI website (www.a-k-i.org) for a nominal fee:

www.a-k-i.org/broschueren

Dates

March – November 2022

(As at: 15 March 2022)

- **Dr. Weigert webinar: in cooperation with the DEGEA**
6 July 2022, 6 p.m. – 7:30 p.m.
- **Dr. Weigert webinar: in cooperation with the DEGEA**
9 November 2022, 6 p.m. – 7:30 p.m.

SAVE THE DATE: The titles and themes of the webinars and registration details will be available online soon.

Your contact at Dr. Weigert: info@drweigert.de

You can find the details for your regional contact (Technical Support/Sales) on our website: www.drweigert.com

Successful Launch: weigomatic® system ALPHA X

The new-generation dosing system weigomatic® system ALPHA X was successfully launched in January 2022. Several versions of the weigomatic® system ALPHA X are now in use in instrument processing in CSSDs and endoscopy departments as well as registered endoscopy surgeries.

If you have any questions, you are welcome to contact our neodisher specialist advisors.



The new-generation weigomatic® system ALPHA XS

Legal notice

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