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INTERNATIONAL

endoNEWS

Best Practice: Processing of Endoscopes

Dear readers,

Elisabeth Kern-Waechter is a pioneer in the development of training in the field of endoscopy. On pp. 1–3, she gives us fascinating insight into the general developments here as well as her own career path. You will find out how specialist processing in endoscopy became a profession and what extensive training is now required in order to perform the highly time-intensive and complex tasks that this job entails.

Efficiency and safety play a key part in bedside cleaning and endoscope pre-cleaning. To find out how you can pre-soak the cleaning cloths even more conveniently using our wipe dispensing system, go to p. 3.

Starting on p. 4, you will find valuable insight into our wide range of product raw materials in our chemistry series "Basics of Our Raw Materials". We begin with the surfactants, as they are one of the most important raw-material categories in the Dr. Weigert range.

Even though the pandemic has eased somewhat, our hands are still having a tough time at the moment. Tips on good hand care can also be found on p. 4.

Enjoy the newsletter!

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Systematic Hygiene

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Training for Endoscope Processing in Germany

An Interview with Elisabeth Kern-Waechter

Ms Elisabeth Kern-Waechter is a pioneer in the development of training in flexible endoscopy. She is the successful head of the training institute ekw.concept! in Walldorf (see also: www.ekwconcept.de), and delivers training measures focused on endoscopy throughout Germany.

Ms Kern-Waechter, would you like to tell us about your career? What prompted you to specialise in this area of training?

I trained as a nurse in the early 1970s. During my training, I never heard anything about endoscopy, as it wasn't really established in hospitals at the time. It was 1979 when I first came across endoscopy, having ended up working in the Endoscopy department of what is now the University Hospital Mannheim (UMM). I was the fifth nursing employee to be hired there. It was the era of pioneers in endoscopy. New medical equipment, endoscopes and new accessories were coming onto the market. Doctors with an interest in endoscopy were advancing endoscopic methods and conditions. There was optimism in the air. At the time, the nursing profession realised that the basic knowledge gained in nursing training was not sufficient for endoscopy. My then boss, Prof. Christian Manegold, often went to international conferences and always brought back new instruments, which we had to test to see if they worked. There were no instructions for use at that stage, just a couple of Japanese characters at best.

The German Nurses Association (DBfK) took charge of the new specialisations. Dedicated training courses for intensive care, anaesthesia care and surgery were established in the '70s. Endoscopy found its place in the DBfK. Our specialist group, the "Central Working Group for Endoscopy", which had one representative from each federal state, was set up in 1979. We developed basic courses for endoscopy together. These were three-week courses with work shadowing, carried out at what was then the DBfK's training institute in Essen.

How was the specialist training in endoscopy devised?

From the outset, the vision was to develop specialist training for endoscopy. A curriculum for specialist training in endoscopy was developed on the basis of the specialist-training curriculum for surgery. The members of the specialist group, of whom I was one, applied findings and experience from the various endoscopic centres to our development work. Hygiene already featured prominently in the teaching back then.

As early as 1985, every endoscope was cleaned, disinfected, rinsed and dried – although they didn't have brushes yet. The endoscopes were usually stored horizontally.

Specialist training started in 1985 with 420 hours of theory and four weeks of

placements in selected departments as a pilot project, sponsored by the DBfK and overseen by me. The course's success encouraged the DBfK to keep it going until it gained official recognition. In 1997, the course was recognised by the German Hospital Federation (DKG), and the curriculum was adopted. Several sponsors subsequently took up this training. The DBfK's training centre then discontinued specialist endoscopy training.

How did you go on to become self-employed?

I had to think about what I wanted to do in the years ahead. Go back into endoscopy? By this point, after 8 years in the Endoscopy department, I was mainly working as a training consultant at the DBfK. I gained my educational skills on the job. Drawing on my experience and my network, I went self-employed in 2000 and gradually built up my institute. I delivered my first course with Thoraxklinik Heidelberg. For several years, there were also courses in Berlin, Potsdam, Munich (Grosshadern) and Heidelberg. Eventually, the training was incorporated in the Commission for Hospital Hygiene and Infection Prevention (KRINKO) recommendations.

Is this specialist training compulsory for anyone seeking to work as an assistant in an Endoscopy department?

The specialist training is not compulsory, unless it is required by Quality Management at the facilities concerned. According to the KRINKO/Federal Institute for Drugs and Medical Devices (BfArM) recommendation on endoscope processing, 50% of employees should have completed the specialist training. In the certification of an Endoscopy department, there is only a requirement for one person with specialist training.

What is the content of specialist "nursing in endoscopy" training these days?

The specialist training is geared towards nurses, paediatric nurses, public health nurses, geriatric nurses and registered nurses who are approved for this training under the "DKG recommendations on specialist nursing training". Those who successfully complete this specialist training receive the job title "endoscopy nurse". This means that they are qualified and can work as experts in the Endoscopy department and help to move the department forwards. Some federal states have enacted state regulations on top of the DKG recommendations.

Participants must complete 720 hours of theory and 1800 hours of practical training within two years. Compared to the specialist training in the early days, it is now even more challenging and time-intensive. The conditions and requirements are constantly evolving and must be adhered to by trained personnel. Have you ever wondered how these hours of theory and practical training are actually measured? Everything is planned meticulously in these two years. Usually, 800 hours of theory are planned rather than 720, to make up for possible absence due to sickness and to achieve the minimum requirement of 720 hours of theory. Generally, the hours of theory are delivered in modules on a weekly or fortnightly basis. One of the most-common questions here is: Do I need to take annual leave specifically for this, or does the hospital give me time off? These days, participants are granted time off by the employer. Participation is possible only on request and with the support of the employer. Endorsement from the employer must always be submitted.

This extensive specialist training covers pulmonary, endourological and gastroenterological endoscopy. As well as acquiring theoretical knowledge, the trainees gain practical experience in these departments. To ensure that this works, many departments must cooperate and offer their assistance. If their own specialist department does not provide the required services, the trainees must do their placement in the same specialist department of a larger hospital, where they can acquire the requisite practical skills. The trainees are often away from their own Endoscopy department for more than a year.

In addition, defined certificates of achievement must be provided, and the final examinations must be passed within the entire training period of two years. This is a huge effort for today's trainees.

Let's talk about the training options if I want to process flexible endoscopes. What courses are there, and which ones should I take if I already work in a specialist medical profession?

First of all, processing is an integral part of the specialist "nursing in endoscopy" training. If you have completed this specialist training, you will have the knowledge and skills required for processing endoscopes. For all other colleagues in a specialist medical profession, there are the following opportunities to obtain the **specialist knowledge** required **for endoscope processing:**

1. Advanced course – 40 teaching units
Everyone who is in a specialist medical profession, i.e. a medical profession with state-approved training, can process flexible endoscopes in medical practice or in an Endoscopy unit as per the qualification directive of the German Society for Sterile Supply (DGSV) with the 40-session (45 minutes each) advanced course to gain specialist knowledge as per the German Medical Device Operators Ordinance (MPBetreibV).*

2. Advanced course – 24 teaching units
However, the process is somewhat different for employees who have already successfully completed a specialist course I (FK I) or an advanced course for processing medical products in the medical and dental sector. These employees require only the supplementary module "Processing of flexible endoscopes" from the DGSV with 24 teaching units (45 minutes each). For example, this applies to CSSD employees who want to process endoscopes either in CSSD or in Endoscopy.*

3. Advanced course – 16 teaching units
Another course geared towards employees who aim to process flexible endoscopes in endoscope group 3 and/or TEE probes is the "Endoscope group 3/TEE probes specialist – DGSV" course. This gives participants the specialist knowledge as per the MPBetreibV for the processing of flexible endoscopes in endoscope group 3 (endoscopes with up to two channels but with no channel system in the supply hose or with no channels in the entire endoscope) and/or TEE probes in medical practice, in a functional unit (e.g. Urology, Pneumology, Intensive Care, Cardiology) or in an Endoscopy unit as per the qualification directive of the DGSV.*

What training options are there if I don't come from a specialist medical profession, i.e. if I'm a "lateral entrant"?

Anyone who doesn't come from a specialist medical profession must complete the specialist course I first.

Specialist course I (FK I)
FK I is the course for acquiring the job title "technical sterilisation assistant". This course lasts 120 hours. Participants must provide proof of two practical deployments before starting the course. One practical deployment in a CSSD of at least 150 60-minute sessions and a further practical deployment in a CSSD of at least 80 60-minute sessions.**

All people who don't come from a medical profession must complete the previously mentioned advanced course with 24 teaching units (see item 2 above) in addition to the FK I. However, the 40-session advanced course (see item 1 above) is recommended. After passing the advanced course and FK I, participants can process flexible endoscopes in medical practice or in an Endoscopy unit in line with the qualification directive of the DGSV.

Specialist training is possible for nurses as well as lateral entrants.

What advice do you give your colleagues?

Address the issues regularly and refresh your knowledge. What's new? What new recommendations are there? Knowledge retention is particularly important in times when resources are scarce.

Everyone should plan for their career path: Where do I want to go? What are my aptitudes? Do I want to develop my educational skills, do I want to lead a team, or do I want to specialise in a specific field? Talk to other colleagues about this. Do your mandatory training. I recommend attending at least five training events per year, e.g. conferences or webinars. Work shadowing in well-run Endoscopy departments is also worthwhile. This is the only way to ensure the requisite flexibility and a high level of quality. Continuous learning is the key to success.

Ms Kern-Waechter, thank you for talking to us.

The interview was conducted by German Beck, Antje Golembiewski, Marcel Jung and Guido Merk.

* https://www.dgsv-ev.de/fach-und-sachkunde/sachkunde-endoskopaufbereitung/
** https://www.dgsv-ev.de/fach-und-sachkunde/fachkunde-i/

Bedside Cleaning: Wipe-Cleaning of Endoscopes

Our Efficient wipe dispensing system neoform® wipes RTF

Endoscopes must be pre-cleaned straight after use in the examination room. This involves rinsing the endoscope channels with a cleaning solution and wiping the insertion tube from the outside with a lint-free cloth.

neodisher endo® MED: *For manual pre-cleaning of flexible endoscopes*

Our product concentrates (e.g. neodisher endo® CLEAN, neodisher® MultiZym, neodisher endo® MED, neodisher endo® DIS active) can still be applied and used for this as usual. To do this, many customers use small stainless-steel containers of the corresponding cleaning solution and dip cloths into them.

With the efficient "ready-to-use" wipe dispensing system neoform® wipes RTF, we provide you with an even more convenient solution for pre-soaking the cleaning cloths with the application solution from neodisher endo® MED. The durable, lint-free disposable cloths can be used for wipe-cleaning during bedside cleaning. Wiping with the pre-soaked wipe removes debris from the insertion tube of the endoscope in a highly effective way. The channels are then rinsed with a cleaning solution, and the subsequent processing steps are performed.

neoform® wipes RTF: *The efficient wipe dispensing system*

You may be familiar with the neoform® wipes RTF from surface disinfection in ambient hygiene. For surface disinfection, the neoform® wipes RTF can also be used in combination with neoform® Rapid and other products in our range.

Further information is available here:
https://www.drweigert.com/fileadmin/Downloads/Prospekte/DrW-1382_neoform_wipes_RTF_Anleitung_BED_SIDE_0922-EN_01.pdf

Authors: Daniela Schricker and Marcel Jung

Chemistry Series: Basics of Our Raw Materials

Part 1: Surfactants

Our products are made from a large number of raw materials. These are crucial to shaping the performance and properties of our products. For instance, whether a product is stable across a wide temperature range and is suitable for removing starch residue or whether it preserves materials at a specified temperature and targets protein soiling, largely depends on the raw materials used. Choosing the right raw materials requires extensive knowledge of chemical substances so that a product with the desired, optimum properties is obtained. In our chemistry series, we will explain individual chemical substance categories and their influence on key product characteristics. In this first part, we take a look at surfactants.

What are surfactants?

Surfactants are one of the most important raw-material categories in the Dr. Weigert range. They allow two liquids that are not actually miscible, e.g. oil and water, to be mixed. Surfactants generally consist of a lipophilic (Greek for "fat-loving") hydrocarbyl and a hydrophilic (Greek for "water-loving") part; they are therefore amphiphilic (from the Greek words amphis, meaning "both" and philia, meaning "love"). Amphiphily describes the chemical property of a substance that is both hydrophilic and lipophilic, i.e. it is easily soluble in polar and non-polar solvents. This core element is what makes surfactants work, and it provides product developers with a comprehensive tool for attaining a desired product property.

Application of surfactants

Surfactants have a wide variety of applications in the chemical industry above and beyond their use in the washing and cleaning industry. For instance, surfactants are used in concrete construction, in paper production, and as an emulsifier in the food industry.

However, the amphiphilic structural characteristic is chiefly used in the washing and cleaning industry. Surfactants decrease the interfacial tension between the aqueous cleaning solution, the rinsed items, the dirt to be removed and the ambient air. As a result, they can act as wetting agents for hydrophilic or lipophilic surfaces and also as foam suppressants or boosters. They serve as cleaning intensifiers and anti-redeposition agents by keeping dirt particles in the rinse cycle and preventing them from being redeposited on the rinsed items.

To find out even more about surfactants, read the entire article here (in German):

https://www.drweigert.com/de/aktuell/wissensdatenbank/tenside

Looking After Chapped Hands

Frequent washing and inadequate skin care can sometimes cause cracks in the skin on our hands. If the skin is not moist enough, it becomes rough, loses elasticity and starts to stretch.

Cracks in the skin appear when dry, taut or diseased skin is stretched. The cracks are usually caused by overexertion and irritation of the skin.

Possible risk factors include
- cold and dry air during the winter months,
- frequent hand-washing,
- dry, chapped hands,
- inadequate skin care.

How to prevent cracks in the skin:

- Use a hand disinfectant with a good lipid replenisher.

- Do not wash your hands too frequently. Soap and water remove the natural lipids from the skin and can make it rough and dry. If you don't have dirty hands, there is no need to wash your hands before hand disinfection.
- Apply hand cream to your hands as often as possible.

Author: Guido Merk

Dates

December – March 2022/23
(As at: 1 December 2022)

- **Dr. Weigert & DEGEA webinar:**
  Subject: KRINKO guidelines on processing flexible endoscopes: How are they devised? How can we work with them? What other stipulations do we need to make?

  The video of this webinar is available on demand here:
  https://www.drweigert.com/de/aktuelles/degea-dr-weigert-webinar
- **25th Int. Endoscopy Symposium**
  2–4 February 2023, Düsseldorf
- **52nd Conference of the German Society for Endoscopy and Imaging Procedures**
  1–3 March 2023, Cologne

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