# Abstracts of the 6th ESGENA Meeting
# October 2002, in Geneva, Switzerland

**Best Free Paper 2002**
**- Category: Poster Presentation**
**- presented on 20 Octiber 2002 in Geneva**

## "One-way only" - Process Optimisation in Reprocessing of Endoscopes

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**Introduction:** Endoscopy associated infections have to avoided. A great variety of manual and automated reprocessing methods have been established. Usually contaminated and disinfected endoscopes are reprocessed and handled in the same room. This include the risk of recontamination.

**Aim** of the project was to optimise the process of reprocessing of endoscopes (qualitative and structural), in order to receive the most possible safety for patient and staff.

**Method:** With minor altered section and redesign the two ways of contaminated and reprocessed instruments could be separated. A contaminated and a clean room were designed, separated by an automated washer disinfector. This special machine (Hamo Endoclean 2000) is equipped with two doors. The door to the clean side can only be opened, when the reprocessing cycle is finished.

**Results:** The establishment of a one-way reprocessing cycle could optimise the processes before and after disinfection. Contaminated and disinfected instruments can be identified. In each room the staff is working following septical and aseptical principles. The installation of the machine in the wall in comfortable working level enable ergonomic working conditions. The costs for the machine increased with 10 %.

**Conclusion:** With minor altered section and redesign as well as acceptable costs the reprocessing of endoscopes could be optimised by establishing a one-way reprocessing procedure. The risk and challenge of nosokomial infections can be obviate.

**Best Free Paper 2002**
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## The Implication on an Endoscopy Unit of Introducing Fine Needle Aspiration into Endoscopic Ultrasonography Procedures

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**Introduction**
The aim of this presentation is to outline the adaptation needed for an Endoscopic Unit to successfully carry out Fine Needle Aspiration [FNA] during Endoscopic Ultrasound [EUS]. This procedure helps determine the nature of cells within a lesion such as a lymph node or pancreatic mass.

**Method**
The technique involves passing a needle down the biopsy channel of a EUS scope. This is guided into the lesion through the gut wall by ultrasound. An aspiration biopsy is then taken. This should only be performed by a skilled Endosonographer with the assistance of preferably three qualified nurses and a Cytopathologist. The presentation will show the specific steps taken by the Endoscopy Unit to secure the necessary equipment and educate the nursing staff assisting with the procedure. The wider implications for the Unit of implementing this procedure such as cost and time will also be explored.
The Endoscopy Unit at the University Hospital of Wales in Cardiff, UK. has successfully performed this procedure for the past twelve months. The Unit now performs 250 Endoscopic Ultrasound procedures per year, of which 100 involve taking Fine Needle Aspiration biopsies [EUS-FNA]. The motivating factor in any invasive procedure is the benefit to the patient. Specialist in this field recognizes EUS-FNA as a useful diagnostic tool, which may help avoid costly and unnecessary surgery. Although potential risks and complications include perforation, acute pancreatitis, haemorrhage and infection, the published complication rates are less than 2%. No complications have been recorded to date in our Unit.

**Conclusion:**
The Endoscopy Unit in Cardiff is proud to offer this procedure as a tool in the Health professionals arsenal and as an example of our striving towards excellence in total patient care. A consequence of this vision is the interest in this procedure by other centers throughout the UK. The smooth implementation of this technique at the University Hospital of Wales was due to an understanding of the wider implications of the staff education and support and the allocation of resources and time. The involvement and interaction of members of the multi-disciplinary team ranging from the doctors, nurses, pathology technicians and pathologists were vital to the successful implementation of this procedure. It is a culmination of their goodwill and efforts that has allowed this development to be a success.

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# Risk Management: Ethical introduction of New Medical Procedures

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New medical techniques are constantly developed. The patient has a right to be treated by competent practitioners. (Convention on Human Rights and Biomedicine 1997). However, not every endoscopist and his assisting nurse will have time to learn the new procedures in a formal setting in an established training centre. Without adequate training the early patients will be at significantly higher risk of adverse events with the following consequences

- Physical and Psychological Tauma (1)
- Loss of trust (in health care professionals & system)
- Law suits

From the aviation industry we know that the CAUSES of ACCIDENTS (2) are

- Loss of Control
- Failure to recognise lack of ability
- Out of current practice
- Overconfidence

and many parallels have been drawn between the airline industry and medical practice from which we can learn when introducing new procedures.

To minimise the risk for the patient a formal **RISK ASSESSMENT** needs to be carried out which should identify the level of risk and the possible actions required to minimise the risks. Any introduction of a new procedure needs to be managed.

Duty of the endoscopy manager is to ensure that
1. relevant equipment is available
2. appropriate staff is available
3. time is allocated for a briefing/teaching session
4. all relevant ancillary staff are informed (e.g. radiographers)
5. List is not overbooked - enough time for new procedure

There should be standard operating procedures (SOPs) available stating that:
1. The most experienced endoscopist & assistant will carry out the first few procedures
2. The team will be briefed together(3) (incl. "Dry run")
3. Only essential staff will be present (to minimise distraction)
4. Remove potential distractions (i.e. bleeps, mobile phones, chatting/observing colleagues etc.)
5. No additional teaching beyond learning the new procedure will be carried out
6. The new experienced team will be responsible for teaching colleagues.

**INFORMED CONSENT** issues need also be addressed. The patients will be suitably informed (including risks/complications and alternatives available) and asked if s/he consents to:
1) Having new equipment/procedure used
2) Having a representative from a company present during the procedure (Confidentiality & Privacy)

The whole episode will need to be **DOCUMENTED** and needs to include
1. Consent to the use of new/non-standard medical equipment/procedure
2. Consent to having a company representative present (if applicable)
3. What type of new equipment and/or procedure was used (Manufacturer etc.)
4. The medical/nursing/etc. team involved
5. What steps had been taken to minimise potential adverse events .
6. Procedure related adverse events or concerns & remedial action taken.

With adequate facilities , trained and experienced staff, and with appropirate management new procedures can be relatively safely introduced to a department with reduced risks for the patient.

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## Aggressive Behaviour Endoscopy Units

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The authors present various forms of violence which occur at nurses' and nurse assistants' workplaces. Basic concepts, used in a broad study among nurses in Slovenia are described in the introduction. The survey study, supported by Nurse Organisation of Ljubljana, Slovenia, took place in 1999. It was the first research of this topic in Slovenia. Statistical analysis of 376 valid questionnaires showed different dimensions of phenomenon, such as incidence, location, time, type of violence and assailants. The conclusion leads us to some actions for violence prevention, such as: education for non violence behaviour, the establishment of Nurses' working group for (non)violence in nursing care, nomination of an Ombudsman for non-violence actions in nursing care etc.

Some questions from extensive study under the title "Violence against nurses at their workplaces in Slovenia" were used again for special research regarding endoscopy field. Different types of violence (physical, psychological, sexual and others) are also discussed in our new research titled **Aggressive behaviour in endoscopy units**, where we ask nurses about perception of violence regarding patients, such as: aggressive acts, long waiting time for examination, lack of time for psychological prepare, ignoring patients' feelings/pain, lack of information and inappropriate workplace conditions.

There will be a great opportunity for participants to share their own experiences regarding aggression in their workplaces with us.

Key words:
violence, aggression, endoscopy unit, nurses' perception.

## Coping with Stressful Situations in the Endoscopy Unit

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**Objectives:** This study aims to show examples of everyday stressful situations in the endoscopy unit and how nurses can deal with them for better team cooperation around the patient.

**Study:** Between 1995 and 2002 different stressful situations have been identified in endoscopy units. The most recent data obtained in may 2002 from 50 nurses and 3 physicians show recurrent incidents in everyday endoscopy for example:

-Delay in the daily schedule
-Lack of trust towards new staff members
-Lack of training for some staff members

These situations often(but not only) involve nurses and doctors. They can be job stressors with consequences for patient care and staff health unless they are correctly managed for team cooperation to improve.

Conclusions reached:

Initial and post-basic training for nurses should include personal self-help strategies enabling to identify stressful situations for themselves and co-workers.

As well as individual strategies to cope with difficult human relationships and critical situations involving the patient, managerial policies are involved. The overall organisation of the healthcare setting touches the local organization of the endoscopy unit.

Efficient communication between co-workers, other partners and supervisors, as well as confirmed competencies reached through planned integration and ongoing educational courses can be effective stress coping strategies.

## nlpK®: The influence of family-systems on health

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Families are communities of destiny. Grandparents, parents, brothers and sisters - for generations, everybody is connected to each other and at the same time in an unconscious way involved with their destiny. This circumstance can make us either weak or strong.

As a child, everybody gets experience on the meaning of health by the way the persons that surround and influence him do behave. People tend to take these experiences for granted and don`t even call them in question.

There are families that pass on the same type of disease and fears for generations. On the other hand, there are also families that-as a good model- spread their experience on a healthy, happy and successful way of living to the further generations.

Some members of one and the same family-system perceive a special kind of sensation which has nothing

to do with their own personal experience. These feelings are sensations, adopted by ancestors personally known or even persons we have never met or seen.
Nevertheless in the complex system called `family` everyone is constantly present and influences the rest of the family. As a matter of fact those influences often can seriously damage persons, when we take these rules only for granted – as a mere matter of fact.

The mind-expanding way of bringing these influences and rules home to oneself, that means making them clear and bringing them into consciousness, causes the client to take more responsibility for their own lives.

The systemical nlpK® is a way of coaching persons respectfully, regarding his naturally given resources and potentials.

Once we live our strengths, we immediately realize the endless vicious circle that determines our lives. When we take the responsibility of our own welfare and build up beneficial rules for our lives, it becomes possible to strengthen our state of health.

The systemical nlpK® is a modification of the nlp also merged with kinesiology and systemical theory.

nlpK® is based on the "Triangle of Health". In this model, body, mind and soul are in balance and equal condition.

We will reach the condition of equality of these three areas when we treat them with the same esteem and push them alternately to the fore.

The work`s quality often is influenced by facts that don`t have its origin in the actual therapy`s topic. By consultation, prevention and aftertreatment of the therapeutical measures, it becomes possible to realize the success of the therapeutical work.

By changing the old models of behaviour which don`t fit any more to our own circumstances, it becomes possible to provide our life with more quality and health.

## Hynosis as a replacement for sedation

Lukas Degen und Wolf Langewitz
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Part of the pain perception is driven by the individual focussing on the parts of the body which are the target of a gastrointestinal investigation. Instead of telling patients not to pay attention to the manipulation – which does not work, because you never forget the green elephant – patients are invited to focus on something else. Turning away attention from one obvious object or perception to a more distant one is a typical indication for hypnotherapeutic interventions. The workshop will deal with problems in ‚selling' this intervention and with procedures that help setting-up a therapeutic alliance which patients.
Patients often reject the idea of trying a trance as one method of distraction because of unrealistic fears: in trance you might do something you normally would feel ashamed of, loosing control, getting lost in trance with no way to return to reality, etc. These fears should be elicited and contrasted with the scientific evidence. This proposal means that nurses should not use premature reassurance before knowing precisely what patients are afraid of. They should use open questions like: 'Do you have any idea what hypnosis might be like?' It is often helpful to remind patients of everyday trance experiences which are normally not perceived as such like not responding to being called when immersed in an interesting book, etc. Inducing trance is easily achieved especially with anxious patients: they respond to a calm and regular voice more readily than persons in standard situations.

Arriving at a state of trance is easier when persons in the examination room lower their voices and avoid abrupt changes in speaking rhythm. Patients should be shielded against noise, 'technical sounds' should be explained to avoid startle reactions.

## Hypnotherapy for IBS and NUD patients

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'Functional gastrointestinal disorders (FGD) are the result of disordered gastrointestinal (GI) function in the absence of known pathology of structure. FGD are among the commonest medical conditions; functional dyspepsia (FD) and Irritable Bowel Syndrome (IBS) account for 40 - 60% of referrals to gastroenterology outpatient clinics.' (British Society of Gastroenterology (BSG)

The association of stressful life events in the exacerbation of FGD symptoms is well documented. Attempts to characterise FGD's has led to an array of descriptions for both upper and lower disorders, with FD and IBS co-existing in some patients. The inability to easily diagnose this condition is evident in the large proportion being referred to specialist clinics.

Medical interventions require a positive diagnosis with reassurance, lifestyle advice, dietary manipulation and pharmacological approaches, but as psychopathology is present in approx 50-60% of IBS patients attending an OPD alternative measures should be sought.

Relaxation techniques have been found to have an effect on reducing autonomic arousal, with a concurrent decrease in symptoms and increasing self-confidence. The use of gut-directed hypnotherapy has been proven to have long-term benefits in these patients, though the exact mechanism by which hypnosis exerts its benefit on the gut remains unknown. Analytical psychotherapy may be more appropriate in cases of repressed emotional trauma.

- FGD's account for a large proportion of specialist out-patient clinic referrals.
- Functional gastrointestinal disorders are often preceded by stressful life events
- Relaxation alone has proven beneficial in reduction of FGD symptoms
- Gut-directed hypnotherapy is extremely effective in the majority of cases though the exact mechanism by which hypnosis exerts its benefit on the gut remains unknown.
- Successful outcome to treatment is determined on positive attitude of the patient
- Analytical hypnotherapy may be necessary in cases of repressed emotions

**References:**

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## Hypnosis in the treatment of GI Patients

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Certain stressful life events have been associated with the onset or symptom exacerbation in some of the most common chronic disorders of the digestive system, for example, functional gastrointestinal disorders (FGD) including post-infectious irritable bowel syndrome (IBS), inflammatory bowel disease (IBD), gastro-oesophageal reflux disease (GORD), and peptic ulcer disease (PUD). Mayer (2000)

Psychological stress or emotional responses appear to affect the gastrointestinal tract, inducing inflammation or tissue irritation. Their severity can be determined by type of stress, genetics, early life experiences, cognitive or environmental factors.

Understanding the complexities of the brain-gut interaction and neurobiology of the organism offers some explanation regarding the body's response to acute and chronic stress not only in functional but also in organic disorders. However, the identification of the specific emotions that bring about this reaction remains elusive.

If a relationship exists between emotion and gut disorders, then we might expect psychological therapies to be effective.
Hypnosis is profound physical and mental relaxation, facilitating an altered state of conscious awareness, rending the client more susceptible to suggestions of 'calmness, relaxation and confidence'. Critical powers are mostly restricted to the conscious mind (Hartland). Hypnosis aims to bypass the 'critical factor' allowing suggestions to enter the unconscious mind, which is less likely to reject them. This in turn reduces the emotional reactions of the gut. The use of gut-directed hypnotherapy has been used with modified suggestion for healing of lesions and reduction in inflammation (Taylor). Suggestions that some benefit can be found from application of cognitive-behavioural therapies may be effective in re-modulation of maladaptive responses in this patient group.

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## Infection control guidelines in Endoscopy: New Guidelines in France

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**Introduction:** Since 1995 new guidelines have developped in France for infection control in disinfection procedures in endoscopy.This presentation aims to present the changes in disinfection procedures in France and present procedure elaboration methods.

**Aims:** To understand the reasons and benefits of the changes in endoscope disinfection procedures and show the implication of the national society of

endoscopy nurses in France GIFE in defining implementable guidelines with other experts.
**Results:** The new laws on endoscope disinfection are being implemented with some organizational consequences and training needs.

**Conclusion:**Permanent assessment of practice and training of endoscopy nurses should help developing the quality of infection control in endoscopy.

## HYGEA (Hygiene in Gastroenterology – Endoscope Reprocessing): Study on Quality of Reprocessing Flexible Endoscopes in Hospitals and in the Practice Setting

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The quality of reprocessing gastroscopes, colonoscopes and duodenoscopes in daily routine of 25 endoscopy departments in hospitals and 30 doctors with their own practices was evaluated by microbiological testing in the HYGEA interventional study.

In 2 test periods, endoscopes ready for use in patients were found contaminated in high rates (period 1: 49% of 152 endoscopes; period 2: 39% of 154 endoscopes). Culture of bacterial fecal flora (*E. coli*, coliform *Enterobacteriaceae*, enterococci) was interpreted indicating failure of cleaning and disinfection of endoscopes. Detection of *Pseudomonas spp.* (especially *P. aeruginosa*) and other non-fermenting rods – indicating microbially insufficient final rinsing and incomplete drying of endoscopes or a contaminated flushing equipment for the air/water-channel – pointed out recontamination of endoscopes during reprocessing or afterwards. Cause for complaint was found in more than 50% of endoscopy facilities tested (period 2: 5 in hospitals, 25 in practices). Automated reprocessing of endoscopes in washer-disinfectors (chemo-thermally decontamination) (used in 23 hospitals and 6 practices) led to much better microbial results than manual or incomplete mechanized procedures and makes standardized and validated effective reprocessing possible.

The study results give evidence for following recommendations:

1. Manual brushing of all accessible endoscope channels has to be performed even before further automatic cleaning;
2. For final endoscope rinsing water or aqua dest. should be used disinfected or sterile-filtered only;
3. Endoscopes have to be dried thoroughly using compressed air prior to storage;
4. Bottle and tube for air/water-channel flushing have to be reprocessed daily by disinfection and sterilisation and in use the bottle have to be filled exclusively with sterile water

The HYGEA study shows that microbiological testing of endoscopes is useful for detection of insufficient reprocessing and should be performed for quality assurance in doctors` practices, too. The study put recommendations for reprocessing procedures in more concrete terms.

## Multi drug resistant micro-organisms (p.a. MRSA, VRE - what is necessary to prevent transmission in endoscopy

Hans Immink, Nijmegen, The Netherland

Infections transmitted by endoscopic procedures are described worldwide and have lead to the development of special cleaning and disinfection procedures. Due to the increasing use of therapeutic endoscopy the construction of endoscopes and accessories has become more complex nowadays. Therefore cleaning and disinfection of these complex instruments should be done automatically to obtain reliable results.

From epidemiological point of view there are no differences in transmission of multi drug resistant bacteria and common bacteria. The real problem is the problematic treatment of multi drug resistant bacteria in case of infections. Hygienic measures are the most effective way to prevent transmission of micro-organsisms, including multi drug resistant bacteria.

In endoscopy this means to avoid direct contact with bodyfluids of patients by protection measures and the use of effective automated cleaning procedures of equipment and instruments. However due to the lack of reliable warning systems in most endoscope disinfectors devices obstructions in endoscope channels are not always noticed. The Dutch guidelines advise to clean (and brush) endoscopes first by hand.

In studies on the efficacy of detergents used in manual processes microbiological reduction of at least log 4 have been found. In automated cleaning procedure reductions between log 4.0 – 5.0 are achieved,

depending on detergent used. Combining both approaches, in the light of natural contamination levels of log 9,0 show that these form a major microbiological reduction.

Finally disinfection will remove the small remaining bacterial load from the endoscopes.Transmission of micro-organisms, including multidrug resistant bacteria, seems very unlikely after adherence to these procedures.

## Quality Assurance in Reprocessing in Endoscopy

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Traditionally, quality assurance in Endoscopy has been focused on endoscopic treatment, diagnosis and therapy. Since the 90s, minimal standard terminologies have been developed by various national, European and international societies and bodies. Quality assurance concerning the reprocessing of endoscopic equipment is stated in

- European law (e.g. European device directives (1)),
- general guidelines of hygiene and infection control and
- specific guidelines on cleaning and disinfection of endoscopic equipment.

Certification procedures (e.g. ISO DIN 9001, KTQ) also require quality assurance programmes for endoscopy departments, covering structure, process and out-come quality.

**Structure quality** includes the availability of separate, purpose-designed reprocessing rooms, adequate number of qualified, trained staff and adequate number of instruments, accessories, machines and devices used in the reprocessing cycle.

Standards, based on international and national guidelines, are the basis for a high **process quality** in reprocessing of endoscopes and accessories. Detailed protocols should describe

1) each step of reprocessing cycles of endoscopes and accessories
2) staff protection measures as well as
3) microbiological test, controlling the efficacy of reprocessing procedures, including (2):
   a) testing the reprocessing of endoscopes under routine conditions
   b) testing the efficacy of automated washer / disinfectors machines
   c) testing water quality and air condition systems used in endoscopy departments

The **out-come quality** describe the results and level of safety which should be reached for the safety of staff and patients.

1) The documentation of reprocessing cycles should combine reprocessing data and nurse's data with the patient's data and documentation. The use and reprocessing of endoscopes and accessories should be documented.
2) Microbiological evaluation of endoscope reprocessing includes (2):
   a) no evidence of E. coli, enterococcus as indicator for insufficient cleaning and disinfections
   b) no evidence of pseudomonas aeruginosa as indicator for insufficient rinsing and drying
   c) no evidence of hygiene relevant germs like Staphylococcus aureus as indicator for insufficient staff hygiene or re-contamination of endoscopes
   d) It is recommended to determine the quantity of germs (not more than = 1 cfu / ml)
3) The function and safety of washer / disinfectors can be evaluated with a standardised test, using dummies (Teflon tubes, 2m long, 2mm diameter) contaminated with E. feacium. A reduction of initial germ load of $5\log_{10}$ steps should be reached. (3)

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## Report of a Spanish National Working Party on Occupational Health in Endoscopy

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At the end of 2000, I was proposed to be a part of a jury. This jury was composed by members of AEED (Spanish Association of Gastrointestinal Endoscopy) and members of AEEED (Spanish Association of Endoscopy Nurses and Associates). The jury was presided by Dr Armengol Miró.

Endoscopy units which had submitted a departmental work (nurses, doctors and secretaries) to participate in this event, were eligible for the award.

Among the others presentation, all of the members of the jury agreed that, at that moment, Occupational Hazards was the most suitable one to get it. In Spain, the government had just approved a new law about Occupational Hazards. This fact made the subject particularly attractive. Besides, for personnel who work in endoscopy units, the knowledge about risks is very relevant.

At that moment, Dr Armengol decided to organise a multidisciplinary working group in order to treat in more depth this subject. This group was composed of doctors, nurses and one engineer.

Each member of the group was in charge to develop a part of the subject: Occupational hazards Act, general risks, specific risks in endoscopy unit, enquiry at national level, suggestions from the units, education in prevention, most frequent illness, etc.

The group met some Saturdays along the first six months of the year. Then, we put together our work and Dr Armengol, as the leader of the group, treated to combine and adjust our speeches. He really made us to work hard.

The exposition of this Symposium was held during the National Congress of Digestive Diseases and in the National Meeting of Gastrointestinal Endoscopy in a combined session of doctors and nurses.

As a conclusion of this group I could say that has been important for many reasons. It is the first time that The Spanish Association for Endoscopy Nurses and Associates (AEEED), has been requested to participate with Spanish Association of Endoscopy. It is also important to make aware hospitals, personnel who works in Endoscopy Units, the transcendence of having into account all the aspects of occupational hazards in order to play down or avoid these kind of problems as much as is possible.

## Bacteriologic control of endoscopic high-level disinfection efficacy

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**Background.** There are several clear guidelines for flexible endoscope reprocessing and disinfection. However, there are no definitive and ultimate data available concerning long-term microbiologic safety of endoscope storage.

**Aim** of the study was to perform a long-term bacteriologic follow-up of flexible endoscopes after their high-level disinfection.

**Methods.** Different types of endoscopes were tested (gastroscope, therapeutic duodenoscope and colonoscope). Having finished the examination endoscope was subjected to an initial decontamination including wiping surface with disinfectant (Secusept) and flushing of the channels with water and disinfectant solution (Secusept). This initial step was followed by manual cleansing (brushing and flushing) in immersion of detergent. Then endoscopes were put into an automatic flexible endoscope reprocessor (endo-thermo-disinfector ETD-2 Olympus) providing high-level disinfection using detergent and glutaraldehyde-based solution (Cidex). Bacteriologic assays were done immediately after the high-level disinfection and every day for following five days. Endoscopes were stored hanging in a dustproof cabinet. Bacteriologic smears were obtained from endoscope surface, valves and working channels. Bacteriologic smears were cultured immediately after their collection for all kinds of bacteria including bacterial spores and for Candida Sp. A total number of 135 bacteriologic assays were performed.

**Results.** All endoscopes were bacteria-free immediately after their high-level disinfection in all assays. Only four assays were positive during subsequent five-day follow-up: valve of therapeutic duodenoscope on the 2nd day of follow-up (Corinebacterium pseudodiphteriae), valve of another therapeutic duodenoscope on the 3rd of follow-up (Staphylococcus epidermidis) and valve and working channel of the same gastroscope on the 2nd and 3rd day of follow-up (Staphylococcus epidermidis).

**Conclusions.** Endoscopes for procedures associated with a higher risk of infection (ERCP, sclerotherapy, percutaneous gastrostomy placement) should be re-disinfected just before the examination. Other methods of gastrointestinal endoscopy can use endoscopes disinfected up to five days before without any need of subsequent re-disinfection.

## European accreditation of training centres

Waltraud Künzel, Ludwigsburg, Germany

**European Dialysis and Transplant Nurses Association / European Renal Care Association (EDTNA/ERCA )**

**Accreditation of Nephrology Nursing Programmes/Courses**

**What is the Project?**

The accreditation project aims to accredit programmes of Nephrology Education within Europe. The accreditation project is a major project of the Education Board and currently **3 schools in the UK & Germany** have been accredited. Accreditation can be granted for 1 year up to a maximum of 3 years.

**What is the aim of accreditation?**

To identify a number of quality criteria which can be used to measure course quality
To develop a realistic framework for future inspection of validated courses and periodic review of the quality criteria

**What is the value of accreditation?**
Achieving accreditation is a **sign of 'quality'** in Nephrology education and provides a measure of key aspects important in Nephrology education. Potential students and those who finance programmes have an additional interest in ensuring that programmes reflect agreed principles, which govern Nephrology Education.

**What does the accreditation process involve?**

- Providing information on key areas of the Nephrology Programme on **disc provided by Head Office**
- Payment of **accreditation fee**
- Supplying additional **supportive documentary 'evidence'** which may be required in addition to information on computer disc
- Accreditation requires the completion of an audit of current education programme against a number of '**key areas' to be measured**.
- Applicants complete data on a 'floppy disc' which is **returned to a team of reviewers** who will then make an assessment on whether to offer accreditation status. It is **usual practice** for reviewers to request additional information to support that provided on the floppy disc

"Each profession is self-responsible for the quality of its education"

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# Competency criteria in Endoscopy – different for different grades?

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Competence and competent mean different things to different people, from being concerned with what people can do, a behavioural approach, to incorporating what they know through knowledge, critical thinking and application to varying practice situations.

The UK National Vocational Qualification focuses on the job and the minimum standards that are acceptable defining the skill required for performance in the work place. This approach is not sufficient for registered nurses who need to demonstrate the application of knowledge in their practice. Roach (1992) defines this as,
'The state of having the knowledge, judgement, skills, energy, experience and motivation required to respond adequately to the demands of one's professional responsibilities.'
To define competency criteria for endoscopy in relation to different for different grades of staff, the first stage is to agree the role required by each staff grade. ESGENA has undertaken the initial work in defining the job profile of an Endoscopy Nurse and an outline of the competencies required to achieve this. Initial work in the UK has been undertaken to identify and define the role of the Health Care Assistant in endoscopy. Clarity of role expectation is the first step towards defining competencies. The specific aspects of each role and responsibilities will be examined.

Specific frameworks can be useful in helping to guide the development of competency criteria. Nurses within the speakers' own hospital have simplified Benner's (1984) novice to expert framework to three stages, novice, competent and expert, and have linked it with examples of the type of knowledge required to deliver actual care to provide a Clinical Competency Framework for ward nurses. This is reflective of Carpers (1978) patterns of knowing in nursing, incorporating both the behavioural skills and the knowledge needed to deliver expert nursing care.

An application of this framework for endoscopy will be demonstrated, relating endoscopy practice to the different grades of staff and the skills they require to competently undertake their role within the endoscopy team. This framework would provide a tool for individuals to progress through as part of their continuous professional development and has the potential to be used as a performance management tool.

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## Competence Profiles as a Tool for Human Resource Development

Brita Lindeberg, Medical Department M, Glostrup University Hospital, Denmark, Developing of competence in a day section and endoscopy unit

Everyday life offers a lot of complex tasks for the nurses and the fast progress of new knowledge and technology demands that the nurse is able to change her/his working methods. A continuous education and keeping ones own knowledge up to date is absolutely necessary. The progress in the community have caused changes in the expectations to the hospital and the staff which snakes it extremely important as well to be constantly aware that the staff has the qualifying competencies that is necessary proportional to the tasks.

During the autumn and whiter 2001 we started defining what kind of competencies that was important to our section. The aim was to improve the subjects in the annual appraisals with the staff and carry out a more determined self-confident plan for each nurse.

The whole group of nurses attended the four days' meeting, where we succeeded in describing the purpose and the aim for our work. We described the most common nurse problems and procedures and what competencies the nurses needed to be able to take care of our patients.

We have used Edvardsson and Thomassozi~s dividing in competence areas, though we have chosen to divide only the competence in four main areas, placing the critical competence in the professional area.

We have described the competencies in 3 levels with a starting point in Patricia Brenner's Theory regarding the ladder of competence.

The purpose of this investigation is that the competence of the staff has to be increased in a continuous process in order to comply with the superior objectives for our department described as:

Based on the values for the Medical Department we want to create a department with high professional standard and quality as a key concept within treatment, nursing, education and research.

The aim is:

- To ensure that each employee has an individual plan for training and development
- To ensure that each employee has a personal determined professional development
- To identify the profile of competencies for the whole department
- That the competence for each employee is estimated according to professional criteria
- To ensure that individual wage negotiations are based on the competence for each employee
- That each employee achieves a professional and personal satisfaction in her/his work
- To benefit from the resources of each individual
- To ensure the right selection of new staff

The dialogue between the individual nurse and the head nurse will take place once a year, and the appointment has been made in good time to make it possible for both of them to prepare for the meeting. In the preparation both of them have to come to a decision as to the level of each nurse and what kind of development she/he and the leader agree that she/he needs or wishes.

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## New Endoscopic Developments require new Training Strategies

Marianne Nooyen ,Jelle Haringsma, Dept. Gatro-enterology and Hepatology University Hospital Rotterdam

With the introduction of interventional endoscopy, endoscopic procedures have become increasingly complex. Traditional training by 'see one –do one-teach one' in the clinical setting are no longer fit and acceptable to obtain the necessary basic motor skills and team building . New computer simulators and cadaveric models are developed to improve endoscopic skills training .

New training strategies are developed with an emphasis on team formation around complex procedures.

Anatomic models (mechanical simulators),cadaveric models (EASY model) advanced computer simulators (GI mentor, Simbionix) are particularly helpful in the training of necessary motor skills .Advantages include high- level simulation,vast variation,infinite repetition ,a broad range of complexity levels ,instructor feed-back and the use of virtual assists. The models are particularly effective when used in a structured training program.

Structured training programs for endoscopic interventions are increasingly aimed at instruction of endoscopist and nurse endoscopist as a team. Initial experience in our center has shown a 25% improvement in eve –hand coordination in a 2-day basic endoscopy training program using a computer simulator. Equally favorable results for team training were obtained in a program for endoscopic suturing ( Endocinch,Bard) using the Erlangen porcine stomach model.

Conclusion : New endoscopic developments require new training strategies.Advances simulators can be a powerful tool in structured education. Training of

complex interventionalprocedures should be aimed at endoscopic teams rather than the individuals.

## The Basle-Model of Hospital Placements for Endoscopy Staff

Michael K. Ortmann, Eric C. Pflimlin, Ludwig T. Heuss, Department of Gastroenterology, University Hospital, 4031 Basle, Switzerland

**Introduction:** The need for a structured training and education of endoscopy personnel has been increased parallel to the development and expansion of fibreoptic endoscopy. So far a structured Endoscopy training course has not been established in Switzerland.
**The Aim** of the project was to develop a model for structured hospital placements in gastroenterological and pneumological endoscopy departments with the purpose:

- to offer an individual model of continuing training as well as
- to develop a basic module for a specialist endoscopy training course for nurses and associates

**Method:** Since 1998 individual visits and hospital placements have been established at the university hospital Basle, since August 2001 with a structured plan for hospital placements. Single modules of interest are chosen by the guest student in advance which are the basis for the individual visit.
The programme includes:

- theoretical lectures and practical parts
- parts of train-the-trainer-situations
- assistance during selected examinations
- final discussion and exchange with the mentor

**Results:** Between May 1998 and November 2001 23 hospital placements were carried out. Basic education of guest students: 10 nurses, 7 associates, 6 others, working in hospitals (7), GP practices (7), in industry (2). Duration: approx. 3 days (1-5 days). The most chosen modules were: standards of pre- and post-endoscopy patient care and assistance, discharge of patients, care of biopsies and other organic material, hygiene standards.

**Conclusion:** The explained model of visits and hospital placements with a structured content has proven a success and has been established as a method of continuing education. This model should be part of a future specialist endoscopy training course for nurses and associates working in Gastroenterology / Thoracic medicine.

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## "Word Fly, Writtings Apply " - From oral convocation to written convocation ?

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Why this title ? Why should we be concerned about the convocation of ambulatory patients in endoscopy ?
These patients have to reconcile the fear of examination with their familial and professional responsabilities. Hence, the importance of supplying all the necessary information to help them comply with the necessary technical instructions and limit their anxiety of unknown procedure.
Since the appointments are given by telepnone bythe nursing staff, the transmission of oral informarion to the patient is unreliable. On the other hand the disponibility of the endoscopist at a desired time schedule could be unknown to the nursing staff. This led to the project I realised at CASA ( Cycle d'Approfondissement en Soins Ambulatoires ( Continuing Education in Ambulatory Services)) in 1998, in order to improve and optimize the scheduling system In order to handle the appointment schedule, the transmission of written information to the patient and timetable of all parties involved ( endoscopist, patient, examination room). We chose the « Kronos » program, developped at GUH, which couples the patients' and physicians' agendas, and automatically handles the examination room schedules and sends a personalised written instruction for preparation to the patient( ambulatory ) or nursing station ( inapatient ) concerning the particular examination. « Kronos « auatomatically takes into account the disponibility of the endoscopist according to his/her own agenda. The application of the system for inpatients and outpatients has been successful, confirmingour impressionthat 2 Words fly, writingsapply 2. Writtenconvocationsare here to stay..

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## Can existing classification systems be used in endoscopy ?

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Until the middle of the 20th century medical classifications were the only classifications available in national health systems. In the majority of European countries, medical documentation in endoscopy includes a structured data collection, based on minimal standard terminologies and on the "International Classification of Diseases and Related Health Problems (ICD) of the WHO. Modern nursing models and nursing classifications go back to Florence Nightingale

who used disease syndromes of medical classifications to describe nursing activities. Since the 60s of the last century different nursing models have been developed. With the beginning of nursing research different classifications have been developed, because a common language and comparable data have become necessary:

Diagnostic Classifications:

- e.g. "North American Nursing Diagnosis Association (NANDA)" in 1973, consisting of 13 main groups which brake down to groups and diagnosis

Outcome Classifications:

- e.g. "Nursing Outcome Classification (NOC)" includes 260 detailed nursing outcomes
- nursing outcomes are result of nursing actions, but can only be described if the nursing quality can be measured and compared with nursing diagnosis.

Classification of Nursing Interventions:

- are used as basis for budgets and calculations
- e.g. "Pflege-Personal-Regelung (PPR)" in Germany; "Leistungs-Erfassung in der Pflege (LEP)" in Switzerland; "Nursing Interventions Classification (NIC) in the USA

Comprehensive Classifications:

- e.g. "International Classification of Nursing Practice (ICPN)", "Association for Common European Nursing Diagnoses, Interventions and Outcomes (ACENDIO), combine different existing classification systems.

**Nursing documentation in endoscopy** is based on the nursing process, focused on pre-, intra- and post-procedure care. Up to now nursing data in endoscopy have not been evaluated in a structured way. **Nursing classifications** offer a common language and indicate the level of care in a structured and systematic way.

The majority of European countries work with nursing classification systems in general care. Endoscopy should adapt systems which are already used in its country and hospital. Otherwise the data can not be evaluated and not be used by general care or the respective national health system. In Germany a classification system of nursing interventions (PPR) has been used in general care to make nurses work transparent and to estimate staff recourses. This system is now adapted into endoscopy. It is based on the nursing models of *Hendersen* and *Krohwinkel.*, working with the "activities if daily life" .

**Nursing classifications should be used in Endoscopy because**

- nursing actions in endoscopy become transparent and can be evaluated
- nursing interventions can be a basis for calculation of financial and staff recourses
- a common and uniform, professional language provides comparable data
- clientele of endoscopy departments can be compared
- the evaluation of nursing classifications can be used for quality assurance in endoscopy, for scientific and economic purpose, nursing research will be stimulated.

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## System Integration in Endoscopy

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**Introduction:** Up-to-date endoscopy practice requires state-of-the-art solutions providing an optimal working environment for all those working in endoscopy. In this respect, focus has to be put on efficiency improvement and quality assurance.

**Main text:** In today´s endoscopy departments, individual pieces of hard- and software products such as endoscopes, processors, light sources and report writers are used in interaction with each other. This interaction often creates problems since some products are not compatible with others. In addition, the documentation of a specific examination including images and the variety of products used during this examination is still a cumbersome and sometimes neglected task in daily routine.

With the introduction of the concept of “Endoscopy Systems Integration” and its core software product *ENDOBASE III*, Olympus is focusing on improving workflow efficiency and quality assurance in endoscopy. A concrete example exhibited at this year´s convention is the complete and automated process documentation in Endoscopy based on intelligent communication between the EXERA endoscopy system, the ETD reprocessing system and the ENDOBASE III software within an Endoscopy network.

**Conclusions:** In view of the continuing discussion concerning economic and quality assurance aspects in the health care environment in general and in endoscopy in particular, the concept of “Endoscopy Systems Integration” provides reliable, comprehensive solutions for modern endoscopy practice

# Documentation and Quality Controls of Endoscope Reprocessing

Hélène Desirat, Patricia Madeleine, Thérèse Kiefer, FRANCE

**Introduction:**
When a patient undergoes an endoscopes procedure, the endoscopes team must guarantee the respect of the most basic patient's right: To leave the hospital with no added complications. The development of endoscopes procedures have reduced infectious complications of open surgery. But in order for this new technique to be a real progress in healthcare, it is our responsibility as members of the healthcare team to insure risk management around the endoscopes procedure. Many studies show the risk of disease transmission through negligence of endoscopes reprocessing guidelines. It is our experience that the publication of procedures and quality assessment of their implementation and bacteriological results, are means of keeping endoscopy as safe and even safer than some surgical procedures.

**Summary:**
Between 2000 and 2002 two French hospitals have tested and improved their endoscopes reprocessing procedures by bacteriological controls and organisation of procedure implementation. Different methods are used according to the type of endoscopes and automate washer-disinfector. But common aim and objectives are the basis of these procedures. It is necessary that procedures be written with the team, that experts validate them and that a periodicity of training of staff, assessment of practice and bacteriological controls as well as updating be defined.

**Conclusion:**
We must write what is to be done, do what was written and write what was done. This is the basis of quality assurance in endoscopic nursing care. Management of healthcare units has to be organised to insure that this is possible.

**Suggested further reading:**
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# Home care systems for PEG feeding

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Over six thousand people are fed by gastrostomy (PEG) in Britain today. Enteral feeding by gastrostomy is accepted as the best way to feed long term when adequate oral nutrition is not possible. Meticulous planning begins with the decision to consider PEG feeding. Support and assessment continue long after the patient has left hospital.

PEG patients have specific problems and needs. Ideally these are addressed by a specialised, Multidisciplinary team. Counselling and assessment for PEG is by Multidisciplinary approach, considering not only the indications, timing and suitability for a PEG but also the potential benefits, burdens and risks. Patient education is of paramount importance, enabling the patient, their relatives and carers to make their decision and explore their expectations.

The support of the Multidisciplinary team continues throughout the hospital admission, the PEG insertion, commencement and monitoring of feeds and eventually to discharge planning. This support extends not only to the patient and their family but to all carers, community staff and other involved professionals.

Audit has demonstated a huge reduction in crisis management of PEG problems by the provision of regular monitoring, support and clinical procedures undertaken in the proactive outpatients' clinic. However patients unable to attend the clinic are not denied this vital support as home visits can be arranged. There is also the reassurance of a telephone helpline.

Planning is the key to successful PEG feeding.
Information and education from all members of the Multidisciplinary team support and enable the patient, their relatives and all others who are involved in very complex and vital decisions.

Crises and problems can be prevented by regular and thorough review. Support and education anticipates and facilitates care appropriate to specific and changing needs.

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## EUS guided cytopunction

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The endoscopic ultrasonography (EUS) is a technique of recent diffusion (since 1990).Two types of instruments have been developed one is using a mechanical rotating us probe. the other is using a linear probe. The linear EUS permits the realisation of guided cytopunction (fine needle aspiration FNA). The indications of EUS PNA are mainly represented by the positive diagnosis of a solid or cystic pancreatic or mediastinal tumours and the lymph probe staging, in. order to adapt. the medical or surgical treatment
The examination requires preferably general anaesthesia (upper way) I in order to improve the tolerance and the efficacy, but may be performed ambulatory. Rectal procedure is undergone without sedation. The fluid collected is spread on slides for pathological interpretation.

Complications are few (mild acute pancreatitis in 5% eases). No dissemination along the punction site has been reported.

EUS FNA represents a major tool for improving tumour diagnosis or staging and therefore, to tend to select patients for the optimal treatment.

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## Improving the Provision of Out of Hours Emergency Upper GI Endoscopy.

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**Introduction:** The Endoscopy Unit introduced the out of hours oncall service for upper GI Endoscopy in 1995.To provide a service by a designated endoscopy team to access and undertake emergency upper GI procedures. The procedures are performed on the ward where the patient is based when the endoscopy unit is not open.

**Aim:** To provide a video system emergency trolley to improve the current service

**Method:** The current service using the fibre optic endoscopes sometimes made diagnosis difficult due to the limitations of the equipment. Therefore there was a need to provide a portable video system with the provision of a twin channel video endoscope with the option to provide both diagnostic and therapeutic treatment. The problem area was the existing video stacking systems within the endoscopy unit were very heavy to manoeuvre and a second trolley was required for the endoscope and accessories. One nurse would not be able to transport the two trolleys safely. Health and Safety were not happy for this equipment to be moved. A risk assessment was undertaken which identified the trolleys were too heavy to be moved around the hospital. The movement of these systems could also damage the processors and monitors, which are designed to stay in one area. The issue of opening the Endoscopy Unit was also explored, but the majority of the patients were based on High Dependency or Intensive Care Units and were not suitable to be moved.

**Conclusion:** The oncall team were involved with the service development. The requirements were a lightweight workstation easy to manoeuvre, with a flat plasma screen monitor fitted on an extending arm, ample room for accessories including the heater probe, lightweight processor and work surface for the endoscope. Suitable for one person to transfer safely. The new video system is now in place and has improved the provision of out of hours upper GI Endoscopy.

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## Diagnostic Tests for Helicobacter Pylori Infection: Role of the Nurse

Paul Ceulemans, head nurse Dep. gastro-enterology, Academic Hospital Free University off Brussels

**Introduction**
The Helicobacter-pylori infection is the most frequently occurring infection world-wide. Its pathogenic character was identified in 1982.There are several diagnostic methods available for the diagnosis of the Helicobacter pylori.

The nurse plays an important role in carrying out these tests. Invasive technique for detection of Helicobacter pylori infection *Gastroscopy + biopsy of gastric mucosa* is the golden standard for initial evaluation of the Helicobacter p. infection because histologic examination is the only method of identifying associated pathological processes of the mucosa membrane. The results are only available after a few days.

It is the job of the nurse to assist with the procedure and ensure that the biopsy arrives in the pathology lab along with the accompanying paperwork.

The presence of Helicobacter p. can also be determined via a *fast urease test*, which is based on the urea activity of the Helicobacter p. This test can be performed by nursing personnel.

Non invasive techniques for detection of Helicobacter pylori

Serology for H. pylori:
Infection of the stomach with Helicobacter p. is accompanied by the production of systemic antibodies. It's not really possible to tell the difference between past and present infections. The nurses perform the blood tests for this method. Identification of Helicobacter pylori in faeces. Recently a test has been developed based upon the presence of antibodies against Helicobacter p. in faeces

The ureumbreaththtest
This test is based on the ability of Helicobacter p. to convert $CO_2$ and ammonia. The traced $CO_2$ arrives in the systemic circulation and is expired in the breath-out air.
$^{13}C$, a stable non-radioactive isotope, is used for this test. It has the advantage of being non-invasive, compared to serology examinations, it is more specific and sensitive. Above all, results are available in just a few minutes.

The test can be completely executed by nursing staff.
- On outpatient basis
- Patient must be nil by mouth
- Oral administration of $^{13}C$ ureum and 20 ml orange juice
- Breath samples are collected in a special aluminium sack at 0 minutes and 10 minutes interval (patient remains nil by mouth during this period)
- The filled aluminium sacks are connected to the infrared spectrometer. The result can be read immediately

**Conclusions**
There are many test techniques for tracing Helicobacter pylori, both invasive and non-invasive. In all cases, the nurse plays an invaluable role.

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# Description of Nurses Care in Infection and Other Complications related to Transjugular Intrahepatic Portosytemic Shunt (TIPS) Insertion

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**Introduction:**
Portal hypertension is a frequent syndrome in the course of chronic liver diseases with the following complications: esophago-gastric variceal hemorrhage, ascites, hepatic encephalopathy, and infections. TIPS is a procedure recently introduced in the management of these patients.

**Aim:**
To revise previous studies about indications, contra-indications, advantages and side-effects of TIPS.•To evaluate the nurses care during the procedure.•To follow and control the patients with TIPS.

**Method:**
Bibliographical revision about TIPS procedure.?To check the clinical records of patients with TIPS during the period: 1993-2001.?Evaluation of nurses records in these clinical records.

**Results:**
A total of 38 patients were submitted to TIPS procedure: the cause of chronic liver disease was hepatitis C virus in 52.63 %. The time elapsed between diagnosis of the disease and TIPS insertion was 2.92 years. Nurses care before procedure: Diet, enema, drug, nurse care, usual treatment, fasting, venous punction. Nurses care during procedure: Vital signs control before and after, material control, accommodation of the patient, nosocomial infection control over devices. Nurses care after procedure: drugs, nurse care, defecation control, diet, pain control, vital signs control, rest. These nurses cares were performed in all the patients. The incidence of complications during hospitalization was: infection 22.58 %, TIPS obstruction 32.25 %, others 45.17 %.

**Conclusions:**
•TIPS is a new non surgical and non aggressive option in the treatment of portal hypertension complications. •TIPS insertion improves with a trained team and an adequate equipment to avoid nosocomial infection.•The scheduled nurses care is adequate to prevent complications.

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# Importance of the Nurses´s Role in Risk Prevention in ERCP

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ERCP is a procedure which incorporates endoscopy with x-ray imaging. In the last decade this procedure has progressed from a diagnostic test to a more comprehensive therapeutic procedure. This has greatly increased the degree of risk involved and thus has made the procedure much more complicated and challenging for the medical staff.

The aim of this presentation is to show that the nurse plays an essential role in risk prevention. This role can be divided into three aspects: the **humane**, the **safety** and the **technical**. This paper will present the **safety aspect**, which translates into providing safe treatment.

**The Nurse's Role in Risk Prevention:**

1. Patient Orientation: reducing anxiety level.
2. Equipment Check: making sure instruments are in working order and set up properly.
3. Physician Assistance: the nurse's need for dexterity and the ability to work in harmony with the physician and the rest of the staff.
4. Patient Observation and Follow-up.
5. Infection Prevention.

Marked reduction of complications in ERCP in the last few years has been documented, despite the fact that ERCP has increasingly been used as a therapeutic procedure. The nurse has had the privilege of playing an important role in making this possible.

## Syringe Disposal Practices of the Patients with Chronic Viral Hepatitis

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**The aim** of the study was to investigate the knowledge of the patients with chronic viral hepatitis who employed interferon regarding the use of the syringes and their disposal.

Ninety-eight patients who had been using interferon at least 3 months filled the form including the data about the number of injections, the person who made injections, the mode of disposal of syringes (among the regular trash, in a separate pack, or in a special container). The patients were asked about their educational level, the number of person living in the same house, whether they were informed how to use the syringes, and how to dispose them, and if anybody has viral hepatitis at home. Results: 54 male, 44 female patients with the mean age of 46±11 were studied. They received 80±31 (median: 77.5) interferon injections. Nineteen were taken the injections at a health care center, 60 patients injected the drug by themselves, and a family member injected 19. Sixty-two patients had been disposing the syringes among the regular trash, 14 in a separate bag, and 22 in a special disposal container. Fourteen patients stated that no one explained how to use the syringes. 41 patients had been informed verbally, while only three patients were given written material. 17 patients had got the information from drugstore, 22 learnt from the prospectus of the drug. 45 patients were explained the hazards of the syringes.

Educational level was found to be related with the mode of disposal of the syringes (p=0.047). The higher level of education, the more likely use of special container. 69.4% of the patients graduated from primary schools and 40.9% of those which had at least level of university claimed that nobody explained the biological hazards of the syringes (p=0.0043). The number of the injections was not related to the way of disposal of syringes.

**Conclusions:** The patients with chronic viral hepatitis were not well-informed sufficiently relating to the infectious potential of the syringes which they use, and how to dispose the syringes. The suppliers of health should provide more detailed information on the use of the interferon and the manner of the diposal of the syringes. Drug stores may deliver a plastic container to dispose the syringes.

## Improving Bowel Preparation for Flexible Sigmoidoscopy

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**Design**

Randomised comparative pilot study of self-administered forms of bowel preparation Citramag and Fleet Phosphate Enema was undertaken. The objective of this study was to evaluate two types of bowel preparation namely Citramag and Fleet Phosphate Enema, in terms of adequate bowel cleansing, patient acceptability, ease of administration, possible side effects and cost effectiveness.

**Method**

The pilot study was over a period of two months, involving 110 patients. Patients were selected by simple randomisation, equal frequency was selected for either Citramag or Fleet Phosphate Enema.

Clear detailed instructions and guidelines were sent for both the bowel preparations. On arrival to the unit, each patient was given full information about the study and offered the chance to participate in it. Consenting patients were questioned verbally regarding their acceptability, and tolerance of the bowel preparation.

Two Endoscopists performed the procedures, to exclude bias they were blinded to the type of bowel preparation administered. The Endoscopist was asked to complete a questionnaire evaluating the adequacy of the bowel preparation by clarity of view.

**Results:**

Compliance with the Fleet Phosphate Enema (53%) was the same as Citramag (53%). Excellent bowel preparation in Fleet Phosphate Enema was (19%) to Citramag (14%). Anal soreness, headaches and sleep disturbance was more frequent in the Citramag group.

**Conclusion**
Adequate bowel cleansing was achieved in both Citramag and Fleet Phosphate Enema. There seemed to be better acceptance of Fleet Phosphate Enema with fewer side effects. In screening large numbers of patients in flexible sigmoidscopy, funding is an important issue. The price of each enema, along with mailing costs, shows a significant difference between Fleet Phosphate Enema and Citramag. Our main concern was patient acceptance.

## Does Fluoroscopy Increase the Success Rate While Performing Colonoscopy ?

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**Background and Study Aims :** Searching on Medline in June 2000 on the MESH-terms "fluoroscopy" and "colonoscopy", no randomised trials were found, estimating the value of using fluoroscopy for colonoscopy. The aims of our study were to clarify this,to find out, whether the use of fluoroscopy had an influence on the success-rate, and whether it makes a difference with regard to the technical difficulties as well as to the discomfort of the patients.
**Patients and Methods :** We have carried out a prospective trial for a 6 months period.264 patients were included.The patients were accidentally examined without fluoroscopy-equipment Group A - 139, and with fluoroscopy-equipment Group B- 125.We registered : Indication for colonoscopy, education-level (expertness ) of the endoscopist, duration of the colonoscopy, medication, time of using x-ray,whether coecum was reached ( success ) or not ( non success ) and clinical results of the examinations.In cases where coecum was not intubated, the cause was registered as well as the consequences of insufficient examination..
Eleven endoscopists made the examinations. Two surgical gastroenterologists, five specialists in general surgery and four senior residents. The endoscopists were allocated to the examinations according to the normal practice in the department.After prior information , which was given before the patient came for the examination,the patients were willing to answer the questionnaire and participate in the investigation.After the colonoscopy the patients were asked to answer a questionnaire with a VAS - scale ( Visuel Analog Score )evaluating the discomfort during endoscopy. After one hour the patients were asked to answer, not before, because of the drugs,(Midazolam and Fentanyl ) which were used during the colonoscopy .By the same VAS- scale the endoscopist evaluated technical difficulties during endoscopy and the patient's discomfort. The endoscopic nurse made the same evaluation as the endoscopist.
**Results :** We found significantly higher success- rate with colonoscopy in Group B (84,8 %) than in Group A (74,8 %) (p = 0,045). Pain and looping of the scope were the main reason for insufficient examination.
**Conclusion :** In a modern endoscopic ward fluoroscopy must be available, but it seems reasonable to start uncomplicated colonoscopies without. In cases where coecal intubation is not obtained, conversion to examination with fluoroscopy must be possible.
**The role of the endoscopic nurse during the project.**

## Achalasia: Increasing Incidence or More Rapid Referral ?

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Achalasia is a rare oesophageal motility disorder of unknown aetiology. The reported mean annual incidence of achalasia per 100,000 population varies from 0.5 (Maberry, J.F., 2001) to 0.8-1.1 (Arbner et al, 1993). Our trust catchment area has a population of 300,000, with occasional referral for oesophageal manometric studies from outside the area.

A cluster of patients, 5 in 6 weeks, were found to have manometric characteristics of achalasia. We audited our data for cases from 1998 to 2001 that had demonstrated manometric characteristics of achalasia. The annual incidence was: 1998—2 cases, 1999—2 cases, 2000—8 cases, 2001—14 cases. This raised the question are we seeing an increase in the incidence of achalasia or a more rapid referral of symptomatic patients?

AIMS To determine what factors may be influencing the increase in the annual number of cases with manometric characteristics of achalasia.

RESULTS There were 19 males, 7 females. The age distribution ranged from 20yrs to 80yrs, with 38% =/<40yrs, and 62% =/<60yrs.The number of referrals for oesophageal manometry and completed procedures each year:-

| Year | Referrals | Completed | Achalasia % |
|---|---|---|---|
| 1998 | 169 | 111 (65%) | 2 (0.018%) |
| 1999 | 232 | 147 (63%) | 2 (0.0136%) |
| 2000 | 282 | 187 (66%) | 8 (0.0427%) |
| 2001 | 287 | 195 (68%) | 14 (0.0717%). |

The five channel, solid state, Gaeltec pressure transducer failed to pass into the stomach of 10 (38%) cases. Aperistalsis was a feature in all the cases. The mean resting LOS pressure was raised in 12 cases and normal in 4. Postdeglutition relaxation was incomplete in 15 (57%) cases. Positive oesophageal pressure was recorded in 20 cases (77%). Duration of symptoms ranged from 4months to 12years with a median of 2 to

3years. There was a wide range of referral sources with 46% (n=12) initially referred for gastroscopy on triaged or rapid access endoscopy lists

CONCLUSIONS The number of cases with manometric characteristics of achalasia has increased. It is impossible to be arbitrary about cause and effect. The two week rule, with rapid access to endoscopy for patients with possible upper GI cancer, plus a heightened awareness of achalasia as a condition associated with dysphagia we feel are contributry factors.