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THE ROLE OF THE NURSE IN THE REHABILITATION OF THE PRESSURE, SENSITIVE AND CO-ORDINATING ALTERATIONS OF THE ANAL SPHINCTER = BIOFEEDBACK

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Biofeedback is a learning method in which a physiologic activity is monitored and registered in a computer screen. It consists in teaching and explaining the patient the register that is being making to him/her, so that he/she can notice the function that is being doing and try to modify it under monitor control.

It is indicated and specially useful in the treatment of fecal incontinence and constipation of lower origin (anismus). To include a patient in a biofeedback program it is necessary that he/she has a minimum of physical attitudes, an acceptable cognitive level, motivation and willing to collaborate.

He/she has to have a previous motility study with the following:

In fecal incontinence: 1. A minimal pressure capacity with voluntary contraction. 2. A minimal rectal sensibility.

In constipation (anismus): 1. Pressure elevation, absence of relaxation or irregular reactions (contraction-relaxation) in the different points of registration of the anal channel and/or lack or weak intrarrectal pressure elevation, during the expulsion maneuvers. 2. Negative expulsion test.

The objective of the biofeedback in fecal incontinence is: a) to get that the patients learns how to increase the pressure and duration of the closing of the anal channel. b) to improve the capacity of perception of rectal occupation and, c) to coordinate both phenomenon perfectly.

The objective in the constipation (anismus) is: a) to increase the abdominal pressure and to get a complete relaxation of the sphincters with the expulsion maneuvers.

The methodology to follow for the treatment of fecal incontinence is: 1- to teach the anatomy/physiology of continence–defecation. To explain the functional alterations detected in their case. To teach the necessity of the efforts and collaboration. To establish good nurse-patient relationship and to motivate it. To show and explain registration in a screen. 2 - to teach to increase the pressure and duration of the closing of the anal channel with voluntary contraction. 3 - to improve the capacity of perception loosening the intrarrectal balloon with different volumes until getting the minimum volume able to start the motor sequence desired. 4 - to teach to coordinate with the minimum sensation of rectal occupation, a quick and effective voluntary contraction.

The average number of sessions is: the first 3 every 15 days, later on 1 a month, and then a daily exercise program is given to do it at his/her home, 10 minutes in the morning, 10 at night.

In constipation (anismus): 1. To get that he/she learns how to differentiate two independent pressures: abdominal pressure and anal channel pressure. 2. To learn to carry out the expulsion maneuver (increase abdominal pressure) without contracting the anal sphincter at the same time. 3. To try that he/she relaxes the anal channel. The number of sessions required is variable (2-10).

The review of the literature shows that around 70% of patients recover or improve the fecal continence, and that biofeedback is useful in 60-65% of the patients with constipation of lower cause. In a study carried out in our Unit, we observed that almost all the patients, one month after finishing the biofeedback had recovered the continence or had reduced the number of escapes in more than 75% (except 14%) and that these results stayed in long term. 94% of the patients stated that the treatment had gone well and 91% that it had improved the quality of their lives when reestablished social activities that had been stopped to carry out, all this because they had acquired a better control of the escapes.

NUTRITIONAL STATUS IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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Inflammatory bowel diseases are chronic processes of unknown origin which comprise ulcerative colitis and Crohn's disease.

Patients with IBD present with a large spectrum of nutritional deficiencies that result in anomalies in both anthropometric and biochemical parameters.

Aims of treatment of IBD are the following: to induce and maintain remission and to prevent relapse of the disease allowing patients to have better quality of life. Therapeutic options include: medical therapy, nutritional support, psychological and social assistance, and finally, surgical approach.

In the last decades, the significance of nutrition and its relationship with health has been recognized. As part of this recognition, there is an emergent interest on the role of diet and nutrients as protective agents against disease.

The objectives of nutritional support in patients with IBD are to induce and maintain a correct nutritional status and to prevent nutritional deficiencies. As a general rule, patients with IBD must ensue a complete and balanced diet. In some patients, within a severe flare of the disease it can be necessary to put the patient into bowel rest and give nutritional support.

It has not been recognized any food that can initiate a flare of IBD, however it is important that patients do recognize any aliments that can worsen or exacerbate their disease and avoid them.

There are several nutritional approaches in IBD: intravenous or enteric nutrition as primary treatment of the disease, diet without milk and derivatives and poor in fiber, probiotic supplementation, etc. Except for enteric nutrition in pediatric patients with Crohn's disease, there are no controlled trials that support nutritional measures as unique treatment in patients with IBD.

Our IBD Unit recommends IBD patients to ensure a complete and equilibrate diet.

From February 2003 to May 2003 we have performed a study to evaluate the nutritional status and dietetic habits of our patients with IBD. We have included 160 patients that filled out a questionnaire with epidemiological data, clinical activity of the disease, medications, and dietetic habits. Nutritional parameters (proteins, albumin, cholesterol) were also compiled. Results will be presented at the meeting.

HOW IMPORTANT IS THE UNSPOKEN COMMUNICATION BETWEEN NURSE AND PATIENCE.

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“ A person who doesn't understand a sight, he won't ever understand a long explanation” as an arabic proverb says. The word is not the only communicatiors element that form messages:sight, gesture, posture, touch, voice tone, provide us and project information from the patience to nurse and viceversa.

In percentage terms, 93 per cent of the communication is NON SPOKEN.

The face is potentially rich sending information. It is a multmessage system which transmits facts related to emotional status of patients. It works like a conversational regulator, opening and closing communication channels. Face expressions show us doubt, anger, sadness, fear among others.

The sight is the first link of the communication: It is a recognition gesture, of reception, and openness. It is an indicator that we are not repelling the other one.

How many times have we demand services from one of our colleagues, and the person on duty didn't rise his face to look at us, as if we were an annoying presence? How have we felt?

The non spoken language consists of a non written code, which without a doubt everybody feels and understands it.

It is essential to analyze and interpret all the communication flows that is shown through face, gesture, position, touch, voice tone and the way and intensity of the sight. It cannot be appreciated in all its content the importance that have for a patient that someone can hold his/her hand, touch his shoulder, place right his pillow or move his front.

For all this, it is necessary that men and women nurses develop efficient interpersonal communication abilities so as it will help us to identify the perception that the patient himself has over his needs and problems. It is a way to achieve our most important objective which is to provide an optimal care to the patient and his/her family.

A basic component of the efficient communication is the ability that we have to produce empathy answers.

Sanz Ortiz points out that communication with the patient is an important part of the therapy, and sometimes it is the only one. As a result from the communication and the empathy power is the collaboration. From a practical point of view, we should learn a lot about distances and it is interesting to be opened to an intensive formation in affective care.

Recently studies highlight that what patients wish is the human touch. This is the one which definitely permits us to objectify the human relationship and the solidarity. It is in the touch proximity where the emotional integration is made easier. It makes the patient feel a human being and not a medical problem. The uncertainty produced by not knowing what would happen and the ability to understand the events feeds a feeling of loneliness and defencelessness that we should consider.

THE ENDOSCOPE FROM ANOTHER PERSPECTIVE

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To discover the interior of an endoscope, will be useful to us to know the origins of small operation deficiencies that could be solved by infirmary personnel.

Do we know the endoscope as an instrument of refined interior technology?.

Our objective is:

- a) To visualize how it works interiorly.
- b) To know which components are more fragile and are more exposed to erosions.
- c) To improve their handling and to avoid aggressions.
- d) The care and setting for the next uses.
- e) Their correct handling from the moment of their extraction of the patient until their new uses or storage.

Risk factors:

- Damages in the distal end of the endoscope.
- Bites, squashing from doors and suitcases.
- Perforations of the work channel due to needles, biopsy forceps, deficient wash brushes, pinpoint catheters.
- Perforation of the aspiration channel for bending of the insert section cone or for the one of the light source connector.
- Glasses breaks from hits.

Escapes: the escapes can originate in the endoscope, in the operative channel, in the rubber of the distal end, control boxes and covers of the protective plug because of the waste of the tip.

When the escape takes place, it breaks the security, and the risk of contamination of patient and the entrance of corrosive liquids inside the endoscope arise, damaging its internal parts until the end of damaging definitively the microcamera.

The penetration of liquids produces corrosion of all the internal metallic parts and curved section, taking place the stiffness of the controls, cables and chains.

Test of escapes: never process an endoscope without having carried out the test of escapes; this one, supposes a case of malfunction detection, saving repairing time and cost.

Manipulation: The correct manipulation of the endoscope for the transport supposes to hold the distal end and the light source connector, both with the same hand and to transfer it to the exploration or cleaning area, being aware of the importance to avoid even light aggressions.

Storage: It has to be carried out in a dry and ventilated place, in vertical position, without valves or security plug, having lubricated the valves and plug.

The correct drying after each disinfection is with compressed air, not overcoming the pressure of 30 cm³ since you could damage the lenses and perforate the channels.

Conclusion: we believe that this information on the knowledge of the endoscope will be good to us to improve the quality, its maintenance and its uses.

THIS CAN HAPPEN TO YOU-Emergency situations, problems and solution-

Gwen E. Kreitzman, Tel-Aviv, Israel

When talking about emergency situations in Gastro., we should first consider the different types of emergencies. There are emergency endoscopies: these are unscheduled endoscopies in which the indications render them urgent. We can prepare for the specific exams. We categorize them :

We have the Upper GI bleeders

Lower GI bleeders

foreign body removals

emergency ERCP

Caustic ingestion and others

We cannot however predict the outcomes, for each case is different just as each patient is different.

In my opinion a major difference between scheduled and emergency exams is the inability to be totally prepared. There is no time for patient teaching to lower the anxiety, the patient and his family are stressed. We the staff as prepared and professional as can be are also somewhat stressed.

There are also, emergency situations that arise during endoscopy: these are situations that arise just before, during, after or as a result of endoscopy thus requiring immediate intervention.

For the past 16 years working in GI endoscopy, I have been involved in educating nurses on various issues concerning Gastroenterological nursing.

My main supposition being twofold. One a firm believer in the saying that knowledge is power and two being prepared. For, if something can happen it usually will.

Most of my presentation is based on the rich experiences of me and my colleagues. In dealing with emergencies we have to be resourceful. Drawing on our knowledge and experience. Each situation has its own unique solution. We as nurses specializing in the field of endoscopy can share our experiences in order to minimize the element of surprise.

Most importantly we should try to keep cool, prepare as best as possible, gathering information and listening to fellow staff members, families ,and patients. **THIS CAN HAPPEN TO YOU!**

Your patient may say to you "Is this the ex-ray dept? I am to do a chest exray" don't convince him otherwise he may be right but on the otherhand sometimes the patient has mental disorientation and only thinks he should be elsewhere.

Education of Patients – the Doctor's or the Nurse's Role ?

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INTRODUCTION:

Most health services in Europe are under pressure to provide more and more medical care without appropriate additional funding. This can result in doctors spending less time with patients, concentration on the medical issues of the consultation. However, it has been demonstrated that most conditions are made worse by:

- Poor diet
- Lack of Exercise
- Anxiety & Stress
- Poor (at home) disease management

... all of which can lead to disease relapse in patients with chronic GI conditions. Therefore more time should be spent with patients to educate them about their disease and, where appropriate, relevant life style changes. The question therefore arises who can provide this service most cost-effectively.

AIM:

To demonstrate that to fulfil the role of patient educator:

- Nurses can be trained
- Nurses don't need to become a mini doctor
- Nurses will continue giving "nursing" care
- Nurses can be cost effective
- Nurses will make a unique contribution

FINDINGS

Medical care is focused within the organs the doctor specialises in and tends to be more disease orientated as it is intervention focused. Nurses tend to be trained to give more holistic care, taking into account the patients' psychology as well as sociological factors such as life style, etc. Nurses therefore should be able to fulfil the role of patient educator as

- Education & Learning takes time
- Education & Learning needs language patients can understand
- Changes in Life Style is an ongoing process and needs support along the journey
- Patients do not want to waste a doctor's time with issues they perceive as "trivial"

However, to fulfil this role nurses have to be competent, i.e. have appropriate education both in theory and in practice. Only then will they be able to provide competent and appropriate care

SUMMARY

- A nurse can provide patient and disease education with appropriate training
- A nurse can provide patient and disease education without becoming a mini doctor
- The role nurses play in health & disease education is NOT a replacement for services provided by the Gastroenterologist, but SUPPLEMENTAL

CONCLUSION

- Doctors & Nurses have complementary roles, fulfilling different needs of their patients, although there may be some overlap in the roles
- Therefore, in the interest of the patient, doctors should employ nurses for patient education.

GENERAL ASPECTS OF QUALITY CONTROL IN ENDOSCOPY UNIT

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Quality has become a major priority for healthcare providers, patients and funding agencies.

The demand for quality control in endoscopic procedures is gaining force in most European countries and this justifies the preparation of good practice guidelines for such procedures. In fact a variety of them for appropriate use of endoscopy is now available.

It is important to apply quality assurance because many reasons: to improve the overall quality of care, to limit inappropriate procedures, to limit as much as possible mortality and morbidity, to limit patients complains, to maintain costs, etc.

There are a lot of aspects to take into account, not only patient and procedure are very important but as well disinfection, equipment, providers, education, etc.

Healthcare can be divided (according to Donabedian) into elements of structure, process and outcome.

The structure, in case of Endoscopy, would include the endoscopy unit, the equipment and staff.

The process is the actual endoscopy procedure. It includes: Demographic information, procedure indication, sedation, complications, procedure success and patient satisfaction.

The outcome would be the change in health status resulting from the endoscopic procedure.

Quality assurance involves the quantification of medical care so that, through measurement, problems of effectiveness or efficiency are identified. Then solutions for these problems are developed and implemented, the measure is repeated and it supposes that the quality of medical care is improved.

Pain management in Endoscopy -A quality issue

PAIN MANAGEMENT IN ENDOSCOPY “Before, during and after”

Thérèse KIEFFER RN (Metz FRANCE) Hélène DESIRAT RN (Paris FRANCE)

Introduction

Any aggression even painless on a neurological basis can trigger suffering depending on how this feeling is integrated. The sensation of pain can vary according to the patient's psychological state. Even if the care given is painless it can cause suffering and anxiety related to the area of the body that is touched. Thus an oral medical procedure will not be experienced the same way as an anal one. This is why in the endoscopy setting it is particularly important not to underestimate the pain often related to the patient's anxiety.

Aim of presentation:

- To define pain and suffering
- To reflect upon the endoscopy nurses' role in pain management
- To give some useful tips for pain management before, during and after endoscopy procedures

Plan of presentation:

1/Introduction

2/Definitions

3/Legal aspects of pain management in France

4/Pain management at different stages of the endoscopy procedure

Conclusion:

Very often our patients do not need pain medication, they aren't physically in pain but they are uncomfortable and psychologically suffering. One of the best medicines is the nurses' ability to listen, to explain and just to be the patient's advocate and messenger. So as carers we should not give up on listening and hearing our patients, this is the essence of nursing care.

“You can not care for man if you do not care for his soul” *SOCRATES*

WORK ORGANIZATION IN A DIGESTIVE ENDOSCOPY UNIT

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Summary/Introduction:

The development of medicine in the area of complementary explorations of any specialty requires special spaces for complex, high-risk techniques that have to be controlled by qualified employees.

Regarding our specialty, in a period of almost three decades, digestive endoscopy has experienced a great improvement and wide range in diagnosis and therapeutic techniques. The consequence of this is that there is a need for qualified personnel and special spaces or units.

The digestive endoscopy units are very expensive because of the space, material and high-tech equipment needed as well as for the staff.

The space has a special importance and, due to its expensive equipment, can only be found in big well-known hospitals. In this way, costs, personnel and investment needed can be covered.

A proper organization of these units requires coordination of the multifunctional team and a proper planning of activities. A good coordination and planning will allow a better and more productive and cost-effective daily activity. This will bring a better patient care level.

Taking into account the consulted references, the visited centers –from Hospital de Sant Pau and others –and with my own experience, I have prepared a general plan of a Digestive Endoscopy Unit as well as a working plan.

2. Structure of a Digestive Endoscopy Unit:

The general structure of a Digestive Endoscopy Unit has been divided in three sections: physical space, materials needed and personnel.

PREVENTION OF WORK RISKS IN THE ENDOSCOPES AND IN THE ERGONOMIC MATERIAL.

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The ergonomics is in the center of the prevention of occupational pain.

The ergonomic modifications of the place of work have demonstrated its effectiveness to diminish the incidence and seriousness of back's pain.

The importance of education or information on its prevention is essential.

The most frequent pathologies within the professional endoscopic area are: mechanical postural cervicalgia, mechanical postural lumbalgy, primary or secondary subcraneal syndrome, epicondilitis, carpien tunnel syndrome, chronic painful muscle-skeletal syndromes.

Origin of the lesions, 41,8% due to an incorrect movement, 29,7% because of the adoption of tense postures as a consequence of specific techniques, 28,5% because of the rising of weight or realisation of inadequate efforts.

Risk factors: Cervicalgia generally produced by esthatical postures, working with raised arms, rotations and bendings of the head, anxiety, depression or work insatisfaction. Lumbalgy: age, acute traumatism, mechanical occupational factors, physical exercise, psycho-social factors. Lumbar spine: rotations, complete flexions, hyperlordosis. Patients' move: stretcher-stretcher, stretcher-chair.

Ergonomic factors of work place: correct postural measures, adequate movements, to seat, to push. Environmental factors, noise, climate, light. Use of hydraulic stretchers and ergonomic stools. Work organisation. With it we can achieve: Primary prevention = to avoid pathology. Secondary prevention = to avoid relapse and chronification. To diminish the most frequent causes of labour sick leave for pathology of osteo-articular system.

RISK OF INFECTION ASSOCIATED WITH ENDOSCOPY: REVIEW OF DISINFECTANTS AND STERILIZANTS USED FOR HIGH-LEVEL DISINFECTION IN ENDOSCOPES

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Safety of endoscopic procedures has been a major issue over the last 10 years. Patients should be ensured that all endoscopic procedures are carried out with high-level disinfection endoscopes and with sterile accessories. The level of quality assurance and procedures also depends on the economic constraints of the country where endoscopy is performed.

Endoscopes are contaminated routinely by microorganisms during clinical use. Any method of attempted sterilization or high level disinfection will fail if prior cleaning has been defective.

Failure to use appropriate cleaning, disinfection, or sterilization procedures of endoscopes has been responsible for multiple nosocomial outbreaks and serious, sometimes life-threatening, infections.

Prevention of severe endoscopy associated clinical infections requires strict compliance with detailed reprocessing protocols by specially trained nursing staff. This is one of the most crucial points to achieve the highest quality control standards in digestive endoscopy.

Gastrointestinal endoscopic procedures had been associated with a wide range of infectious complications, including bacterial endocarditis. Bacteremia and other infections, such as colitis, may also originate from a contaminated endoscope. To prevent such an occurrence, high-level disinfection has been recommended for all gastrointestinal endoscopes.

In recent years, several alternatives to glutaraldehyde (glutaraldehyde 2%, glutaraldehyde with phenol), have been developed. These include Peracetic acid (Steris, Nu-Cidex, Perasafe); Chlorine dioxide (Tristel); Super-oxidized water (Sterilox); Hydrogen peroxide, N-duopropenida 2%, Orthophthalaldehyde, Aminas and quaternary ammonium compounds, Gas plasma (Sterrad); and Formaldehyde steam. All these alternatives have advantages and disadvantages. The choice of high-level disinfectants is an important issue for infection control professionals and other healthcare professionals. In the present workshop we will review these new chemical sterilizants used as high-level disinfectants to help in the decision making process.

LASER IN GASTROENTEROLOGY.

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Laser is monochromatic coherent and collimated light. These characteristics induce minimal loss of energy. Some lasers are able to pass through the glass fibber and can be used in GI endoscopy. Several lasers are used for their thermal effect, others are used because the wavelength matches the absorbing capabilities of the sensitizer and produces cytotoxics by chemical reaction and cellular death. The main indications of Laser in gastroenterology are: palliation of malignant dysphagia, curative treatment of superficial and accessible cancer of the upper GI tract, control of acute haemorrhage, control of non-acute bleeding and vascular abnormalities and treatment of some benign polyps.

Laser in GI endoscopy needs a complete endoscopic equipment, the laser generator and specific fibres. Great attention must be paid to the protective ancillary tools. The protection will cover the patient the physician and nurses. The use of glasses adapted to the specific wavelength are mandatory instead the use of videoscopes which minimize the problems during the procedure. The non-reflecting walls are convenient in reducing risks. It is also necessary the adequate protection of the skin for both the patient nurses and physicians in the treatment theatre.

To minimize de risk adequate information is necessary outside the laser box. The procedure is made as regular endoscopy under sedation or anaesthesia. For tissue ablation the main laser used are Nd-YAG or similar which induce high temperatures when absorbed by the target tissue. Low power induces coagulation and retraction of the target tissue. Increasing the laser power tissue vaporization is obtained. High power promote carbonisation. Low power is usually used for haemostasis or treating angiodysplasia. For tumour palliation the vaporization is usually used and serial sessions every 48 hours will be convenient. The main risk of Nd-YAG is perforation.

Other laser often used to cure superficial o oesophageal tumours and Barrett mucosa is the PDT (Photodynamic Therapy) A sensitizer (Photophrin) at a dose of 2 mg/Kg is administered IV. After sensitizer injection the patient must be protected from white and intense light during a period of 4-6 weeks. Laser (630 nm wavelength) at a dose of 400 Jules/cm must be administered 48-72 hours after sensitisation to the lesion zone using a special diffuser fibre. The tissues with sufficient concentration of the sensitizer who receive sufficient laser light become necrotic. This effect is evident just some minutes after treatment and will be complete 24 to 48 hours thereafter. The endoscopic observation allows to know if new illumination will be convenient 72 hours after injection. It is published that the superficial tumours less than 2 mm deep will be completely ablated.

For applying any laser procedures the knowledge of secondary effects of the type of light use is mandatory and it is necessary to follow the strict protocolized rules in protection and treatment to avoid risks.

ASPECTS OF OCCUPATIONAL HEALTH IN RADIOLOGY

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Nowadays it is well known that personnel in Endoscopy Units, are likely to be subject to some kind of danger during work. We need to work with X-rays during ERCP, prothesis colocation and so on. Some can cause more or less serious health problems.

X-rays are a form of electromagnetic radiation with a shorter wavelength, higher frequency and higher energy than visible light.

X-ray have the capacity to break chemical and electrical bonds within molecules. X-ray energy can be quantified in terms of the amount of ionization it produces in a matter.

When X-ray are absorbed by tissue, transferred energy can modify the chemical structure of biomolecules and produce mutations in DNA.

X-rays beam is then directed through the patient's body where it is attenuated by the net effect of both tissue absorption and tissue scattering. The x-rays that pass through the body and remain in the direction and plane of the original beam are then detected to form an image. X-rays that are scattered by tissue exit the patient at all angles and are the source of exposure to endoscopy personnel in the vicinity of the patient. Another source of leakage is from the x-ray tube housing. Nowadays the x-ray equipment is periodically tested.

Other techniques that can be employed to reduce exposure include: using magnification fields only when necessary, collimating the x-ray field whenever possible, avoiding high level control fluoroscopy unless absolutely necessary and reducing the gain of the video system for digital units. Distance from the radiation source plays an important role in radiation reduction. The inverse Square Law (1/distance squared) is applicable to radiation exposure and distance from the radiation source. Time is also important during exposure.

Restricting access to the fluoroscopy room. The use of the video endoscopy, high quality image intensification, use of digital radiography, and experience are helpful (ASGE 1994).

It is also important the use of protective devices, including at a minimum lead aprons and lead thyroid collars. Other accessories are lead eye-glasses and protective shields between the x-ray table and the worker. Lead goggles are worn to prevent cataracts.

HOW TO REDUCE STRESS: TECHNIQUES AND APPLICATIONS

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Summary/ Introduction:

We can tell that the stress is a reaction of our body to signals of danger. Stress is a phenomenon that appears in front of situations perceived as difficult in life.

To have some degree of stress in life and in certain situations can be good and even convenient. A certain amount of tension is necessary to maintain an active and productive life. Moreover, in some cases, the changes created by the stress prepare us to react properly and can help save our lives.

On the other hand, an excess of tension can be destructive and can weaken us not allowing us to enjoy life. When we have long periods of stress, economic and social burdens, an excess of work, a competitive environment and other factors can be perceived for many as threatening and difficult.

We are living in a world full of large and continuous changes that in many cases create uncertainty, insecurity, anxiety and stress. Stress is the disease of our times. It affects women and men, young and old.

We can't avoid having stress but we can learn to control it and thus avoiding its physiological, psychological behavioral effects. With prevention and with certain techniques and applications we can reduce stress and avoid to reduce its effects.

Objectives:

Show the phases, components and elements that produce stress. Show the answers, symptoms, effects and prevention of stress. To show the techniques and applications used to reduce stress and its effects so that nurses can be able to use them in their daily work for their own benefit and thus improving patient care in hospitals.

TRANSCULTURAL NURSING: Nutrition , culture and healthcare

Hélène DESIRAT, Claudine LAHAYE and 17 French nursing students

Introduction:

Purnell's theory on transcultural nursing has been used for adapted plans of nursing care in the United States and in Canada. This approach to nursing care is appropriate in Europe since nurses can now work in different countries. Also, on a daily basis in each country patients from different cultures are cared for by the healthcare team. The findings of this study could be adapted to the endoscopy nursing care.

Aim of the study project:

To enable 17 nursing students from 3 French nursing schools to understand the influence of cultural beliefs and practices on healthcare. This study was done in the area of Dakar (west Africa) in June 2003 using Purnell's transcultural nursing model.

Results:

17 students divided into 4 groups in 4 bush dispensaries observed health and nursing practices in the aim to find the link between health, culture and nutrition for patients. The Purnell model of transcultural nursing enabled the 4 groups to observe similar situations in different villages. Their findings were presented to the dean and teaching team of the country's leading healthcare studies school.

Cultural representations concerning breastfeeding, maternity, health and nutrition associated to economical and political and religious factors were identified as factors to take into account in the adaptation of healthcare practices to these populations wherever they may reside.

Conclusion:

To understand the needs of immigrated patients, the knowledge of their cultural beliefs regarding health and life in general should develop the quality of nursing care to them. According to the definition given to "immigration" or "migration" transcultural nursing does not only concern "foreigners".

Education of PEG-Patients

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FIELD OF ACTIVITY:

A good basic knowledge and a broad experience is essential in the conscientiously care of the enteral nutrition and the PEG- tubes, with the complications that may arise as well as an orientation for the different entrances to the intestinal digestive system. A wide knowledge for the availability of the different PEG-Systems, PEG-intestinal and buttons as well as all different naso-gastric tubes is important.

The importance of the scope of practice of the nurse providing the total care in the Endoscopy is to ease the diagnostic measurements in order to NOT become a sort of a HORROR TRIP for the Patient. On the other hand is the conscientiousness care of the Patient during the procedure important as well as the monitoring of the vital signs and functions and at the same time an effective procedure assistant to the Physician. Her is a substantial endoscopic technical experience in the procedure from the nurse necessary, for example the therapy of an acute hemorrhage of the upper intestinal tract.

CONNECTION/ NETWORK TOWARD THE ENDOSCOPY:

Besides the competence of the care in this special field, there is today the need of wide knowledge of the clinical hospital account insurance politics and those changes. There is not to miss the DRG's and the connecting clinical inpatient stay as well as the definition of the "Clinical Pathway, the definition of the 'Path of the Patient through the clinical Stay' " indispensable. In connection with the ever-increasing costs in the German Health Care System is a well knowledge around the minimizing of costs in the inpatient and outpatient care in addition to the specialization in certain fields of applications important. The special knowledge in the enteral nutrition of infants toddlers juveniles and also outpatient clients as well as geriatric clientele with insufficient nutrition stage is in the need of a broad expert knowledge. Especially the care in the outpatient field requires often independent and immediate action to take if a problem arises or a supplemental part is to be obtained. It requires a broad field of praxis the explanation to the Patients and their relatives. How is the smooth and best care possible in order that the Patient at home can accomplish it? At what point is the Patient ready to be released from the hospital and is provided with all the essential materials at home to be able to provide there an adequate care? Who teaches the Patient, the relatives and/or the home care providers at the patient's home in details?

PARALLEL TO DIFFERENT CARE GROUPS:

A good overlook for all internal clinical thresholds and out-clinical Insurance possibilities in the German Health Care System such as

- Clinical Social-Workers
- Integration care giver
- Clinical Doctor, Primary Physician [=Hausarzt]
- Outpatient care [home health care]
- The home care service from the nutritional company has to be available at all time [24 /7 gemeint fur 24hrs/day and 7 days/week] for trouble shooting or problem solving.
- Physicians are often overwhelmed with the multitude of different nutritional options.
- All health care providers, especially in geriatric care settings or in assisted living housings are in need of a fundamental continues education in this field.
- An exact scope of practice for the different care groups has to be established for situations when the Doctor has to be involved.
- In assisted living facilities is the Dietitian / Oecotrophologe to be educated for supplemental nutrition in this field, since it requires a specific knowledge.

CONTINUES EDUCATION FOR CARE PROVIDERS:

There is no State Approved Special Qualification in this field at this point. The companies supplies personal which they trained themselves with their own products. These companies generally require a good basic health care education in order to provide a high standard of their employees. Too often we nurses have to prove our competency on the Patient through 'learning by doing'. As an alternative would be the Science in the Nutrition as a new curriculum recommended.

SUMMARY:

The nutritional care can be a broad field that requires a special knowledge for the variety of products and care institutes. Although in the overall field of the health care it stands there with only a very small area.

AND YET, EATING AND DRINKING IS A FUNDAMENTAL REQUIREMENT FOR DAILY LIVING.

Abstract of Scientific Programme on 2-3th November 2003

PREPARATION OF PATIENTS WITH CHRONIC DISEASES.

INTRODUCTION AND OBJECTIVES.

In the presence of an increase of aged patients and as a result of that the increase of pathologies associated to age, appear two problems: more probability of digestive endoscopy needed and more complications rate from chronic diseases. Form digestive endoscopy nursing role, we are forced to set up specific preparation protocols for those patients, based on the present pathology and/or actual treatments. The communication's objective is to show our experience and intervention guidelines at the preparation protocols of digestive endoscopies of patients with chronic diseases: cardiac, respiratory, renal, haematological, endocrine, neurological, infectious, psychiatric, known allergies, previous surgery, and particular digestive diseases.

DISCUSSION.

In the first place, we consider essential to the preparation protocol an adequate application form filled up with the reasons of the exploration, medical and surgical history, allergies, and concomitant treatments. We must pay attention to patients with clear contraindications to digestive endoscopy: the suspicion or the certainty about hollow viscera perforation, haemodynamic and/or cardio-pulmonary instability with vital risk. At recent surgery (less than 7 days), and recent heart attack we must value the need of diagnosis vs. risk. Referring to patients with neurological and/or psychiatric history would be necessary the intervention of an anaesthetist who achieves a previous pre-anaesthetic study. Besides, we must pay attention specially to patients with anticoagulant treatments to modify the dose according to the exploration (diagnostic or therapeutic). Moreover patients with cardiac prosthesis, immunodeficient, AIDS, or with some particular infectious diseases must modify specially the preparation. Furthermore, patients who heart suffer, renal and/or respiratory failure and important diarrhoea cases, need special preparation protocols.

CONCLUSION.

Although the preparation protocols of digestive endoscopy explorations are well known, exist an important and growing group with chronic diseases who needs a specific information and preparation. In any case, nurses must be on the alert to identify and value any modification from standard protocols to an adequate situation.

PREPARACIÓN DE LOS PACIENTES CON PATOLOGÍA CRÓNICA, PARA LA REALIZACIÓN DE ENDOSCOPIA DIGESTIVA.

INTRODUCCIÓN y OBJETIVOS Ante el aumento del número de pacientes de edad avanzada y el aumento consiguiente de la patología asociada a la edad surgen dos problemas: mayor probabilidad de precisar exploraciones endoscópicas digestivas y mayores tasas de complicaciones por la presencia de otras enfermedades crónicas potencialmente graves. Desde el punto de vista de la enfermería endoscópica digestiva, esto nos obliga a establecer protocolos de preparación específicos en estos pacientes, en base a la patología que presente.

El objetivo de esta comunicación, es presentar nuestra experiencia y guías de actuación en la preparación de exploraciones endoscópicas digestivas de pacientes con patologías crónicas cardiacas, respiratorias, renales, hematológicas, endocrinas, neurológicas, infecciosas, psiquiátricas, alergias conocidas, cirugía previa y determinados procesos digestivos.

DISCUSIÓN. En primer lugar consideramos esencial para el protocolo de preparaciones para las exploraciones digestivas que la solicitud venga adecuadamente cumplimentada, además del motivo de la exploración, con los antecedentes médicos y quirúrgicos, hipersensibilidad a fármacos, y tratamientos farmacológicos que venga realizando. Debemos además estar atentos para evitar preparar a pacientes con claras contraindicaciones para la realización de endoscopias digestivas como la sospecha o certeza de perforación de víscera hueca, inestabilidad hemodinámica o cardiopulmonar que conlleve riesgo vital para el paciente. Postoperatorios recientes (menos de 7 días), IAM reciente, es obligado establecer la indicación en base a la importancia de alcanzar un diagnóstico, valorando el riesgo y el beneficio en ambos sentidos y esto implica el modo de preparación, ya que en pacientes psiquiátricos, con determinadas patologías neurológicas o no colaboradores, la técnica puede ser preciso que se realice bajo sedación controlada por un anestesiólogo por lo que se impondrá la valoración preanestésica previa. Para la preparación de las exploraciones endoscópicas nos merecen especial atención los pacientes diabéticos que deben modificar la administración de insulina y/o ADO antes de la técnica. Los pacientes en tratamiento con antiagregantes o anticoagulantes, así como aquellos que presenten trastornos de la coagulación, deben tras su adecuada información, modificar también su pauta de tratamiento en base al tipo de exploración diagnóstica o terapéutica al que vaya a ser sometido.

Los pacientes portadores de prótesis cardiacas o antecedentes de endocarditis, así como pacientes inmunodeprimidos, pacientes con Sida o afectos de determinadas enfermedades infecciosas activas, han de modificar la preparación específicamente.

Los pacientes con insuficiencia cardiaca, renal, respiratoria o con cuadros diarreicos importantes requieren un protocolo de preparación especial

CONCLUSIONES Aunque los protocolos de preparación para la realización de exploraciones endoscópicas son bien conocidos, existe un grupo cada vez más numeroso de pacientes portadores de enfermedades crónicas que requieren una información y preparación específica que hacen aconsejable la valoración e indicación de pautas apropiadas a cada caso.

ENDOSCOPY IN INFLAMMATORY BOWEL DISEASE.

ATTENTION OF INFIRMARY.

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Inflammatory Bowel Disease is generally used to make reference to ulcerative colitis that affects the colon and Crohn's disease that can affect the colon and the small bowel. It also includes a group of patients not well classified, defined as indeterminate colitis.

In these two entities exists a chronic inflammation of the intestine that evolves in a recurrent manner, being their etiology unknown. Although the etiology is unknown, a series of factors related with the appearance of the illness exists, about the genetic bias, and environmental factors that unchain this disease.

Genetic factors: the epidemiologic studies provide clear evidence of the existence of genetic susceptibility for these diseases. The frequency of family history oscillates between 5,5 and 22,5%. The most important risk factor to suffer an inflammatory bowel disease is to have a relative with the illness. The relative risk for a brother of a patient with Crohn's disease varies between 13 and 36, and between 7 and 17 for a brother of a person with ulcerative colitis. The patients with Crohn's disease and family history usually manifest the disease at an earlier age than patients without family history.

The influence of the environmental factors in the ethiopathology continues to be one of the most difficult aspects to establish. Among the multiple studied factors, only the influence of the tobacco and appendectomy have been confirmed by several studies. Ulcerative colitis tends to appear in non smokers, while the tobacco increases the risk of suffering the Crohn's disease.

Although patients tend to look for a relationship between the diet and these affections, there is no evidence that associate the appearance of inflammatory bowel disease with certain components of the diet, neither changes in the nutritious habits alters the evolution of these diseases. Endoscopy is an mandatory exploration since it, besides valuing the aspect of the mucosa, allows the taking of biopsies that confirmed the diagnosis. The information to the patient of the colonoscopy is necessary to get its participation in the exploration. It is necessary to explain the patient the need of this exploration to diagnose and follow up this disease, the necessity of multiple biopsies and the possible complications, perforation, abdominal distension and haemorrhage. In the preparation for the colonoscopy, the patient need to follow a diet without residuals and liquids 24 hours before, and they have to take intestinal lavage solutions.

The endoscopic procedure is frequently long, because of the need to enter in the ileum and obtaining multiple biopsies. The endoscope should advance slowly to assure a correct vision of the mucosa. Rectifying the endoscope is often necessary and helps to complete the exploration and performed ileoscopy. Usually are young patients and often require anesthesia.

Wireless capsule endoscopy allows us to visualize the small bowel. Psychologically these are patients that think a lot of their illness with depressive and anxiety episodes, that face another way of life and demand all the family attention they need. The nurse develops an important role. The previous valuation and the infirmary cares are of help for the security and comfort of the patients. The creation of work units may contribute to improve the quality of these patients' life.

PERCUTANEOUS ENDOSCOPIC GASTROSTOMY AND BUTTON SYSTEMS- - MATERIALS, PROCEDURES AND LATE COMPLICATIONS

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The placement of a percutaneous endoscopic gastrostomy (PEG) is a multidisciplinary decision. Depending on the underlying clinical problem and patient prognosis, the wishes of the patient and his or her family often weigh heavily on decisions regarding the appropriateness of enteral tube access and the material that will be used.

In our hospital PEG placement is carried out according to protocol. A brief explanation of the placement and removal is required to understand the importance of good follow-up care to avoid complications. Follow-up care

during the first week and afterwards, with clear instructions for the patient, family, nurses and other caregivers is important.

When a gastrostomy is to be replaced with another device, knowledge of different materials that are available can help to decide which material can be used.

Late complications that can occur are: 1. Leakage of fluid; 2. Irritation of the skin; 3. Balloon-leakage; 4. Clogging of the tube; 5. Hypergranulation; 6. Dislocation of the tube in the first week; 7. Dislocation when the track is completely formed; 8. Migration of the balloon with obstruction of the antrum or duodenum; 9. Buried bumper syndrome.

Knowledge, prevention, recognition and management of these PEG-related problems, makes it possible to reduce the complication rate.

Conclusion: The placement of a percutaneous endoscopic gastrostomy is considered a very safe procedure. In general complications are rare and mild, but occasionally can be serious and life-threatening. Therefore it is important to educate patients, family, nurses and other caregivers in the placement and follow-up care of a gastrostomy, in order to avoid them.

References:

Practice of therapeutic Endoscopy, second edition, by Guido NJ Tytgat, Meinhard Classen, Jerome D Waye and Saburo Nakazawa, © Harcourt Publishers Limited 2000
Procedures in hepatogastroenterology, first English edit

Important Changes Leading to Significant Improvements in Bowel Preparation for Colonoscopy Procedures

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Introduction

The indications for colonoscopy are varied but an optimum diagnostic procedure can only be achieved if the patient has had good preparation of the bowel. Clear vision of the bowel is essential.

Good bowel preparation improves the success of the procedure, reducing trauma and stress to the patient. It will also reduce the waiting list for repeat procedures due to poor bowel preparation.

The original bowel preparation used was two sachets of citramag, which did not produce a clean bowel.

Objective

The objective of the study was to improve the effectiveness in bowel cleansing by introducing another form of bowel preparation, senna, to work with the current preparation of citramag.

Method.

A working group was set up to look at making significant changes to the current bowel preparation. The team included the manufacturers, the pharmacist, Research Registrar, and two nurses. A literature review was undertaken to establish if this method of bowel preparation had been used previously. The ethical issues were addressed of introducing a change in bowel preparation and if there would be any side effects for the patients. The pharmacist researched the data on the quantity and preparation of the senna and compatibility with the citramag. The granules would have to be bought in bulk and made up by pharmacy to the correct dosage in small pots. A patient information and instruction leaflet was designed on how to take the regime. The two sachets of citramag, the pot of senna granules and the instruction leaflet were all prepacked in individual packs for each patient. A Pilot study (no 1) was undertaken of 50 patients taking the senna in the morning prior to taking the citramag. A record was kept of how the endoscopists reported the bowel preparation – poor, satisfactory, good.

Results

The data found that 64% of the bowel preparation was poor / satisfactory. The group reviewed the data and, seeking advice from the pharmacist, changed the regime for the patients to take the senna the night before starting bowel preparation. The information leaflet and instructions were changed. A 2nd pilot study of 50 patients, randomly selected using this preparation was reviewed. A record was kept of how the Endoscopists reported the bowel preparation – poor, satisfactory, good. The data found 60% of the bowel preparation was good.

Conclusion

We have found by changing the regime for bowel preparation, significant improvements have been achieved to bowel cleansing. The Endoscopists have commented on the improvement in overall bowel preparation. This

study has been cost effective whereby the patients do not have repeat procedures due to poor bowel preparation, thus reducing the trauma and stress to the patient. Good bowel preparation can be achieved by a good regime and clear concise instructions for the patients. Clear vision of the bowel is essential for diagnostic / therapeutic colonoscopy.

ORAL HYGIENE PRE PERCUTANEOUS GASTROSTOMY TUBE PLACEMENT

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BACKGROUND

A significant percentage of PEG patients could be categorised as an “at risk” group for fungal colonisation and opportunistic infections. Oropharyngeal candidiasis (OPC) is a common, opportunistic fungal infection, the most prevalent site of colonization is the oral cavity. Staphylococcus Aureus (SA), a common gram positive bacteria, is a potential pathogen for opportunistic infections. Cancer metastasis at the PEG stoma originating from oropharyngeal and oesophageal tumours is being increasingly reported (Brown, MC 2000). Seeding of OPC or SA to PEG sites does not appear to have been investigated. Colonization of PEG tubes with candida has been documented (Gottlieb et al, 1993 & 1994; Marcuard et al 1993).

AIMS

To assess the potential importance of oral hygiene prior to PEG placement

METHOD

An audit of 100 patients who returned to the unit with a PEG “problem” showed that 40% had site infections. A review of these 40 patients was undertaken.

RESULTS

Microbiology from the PEG site swabs of these 40 patients reported 20 (50%) SA and 6 (15%) candida albicans in the organisms isolated.

CONCLUSIONS

PEG patients are potentially at risk from opportunistic infections that colonise the oral cavity. Further research is needed with larger groups of patients.

DISCUSSION

Pre procedural antibiotic cover is given to PEG patients. If OPC is present should prophylactic antifungal cover be given? We have amended our pre procedural PEG protocol to include examination of the oral cavity for signs of candida infection by the assessing PEG nurse. Anti fungal therapy will be commenced where appropriate. In addition all PEG patients have a mouth wash with an oromucosal solution the evening prior to and the morning of their PEG placement. Chlorhexidine Gluconate 0.2% has been the solution of choice because of its antifungal and antibacterial action. It is effective for gram +ve and gram –ve organisms and in addition has a residual effect that prevents microbial regrowth. We will review the incidence and type of site infections 6 months after this change in practice.

CANDIDA, DENTURES & UPPER ENDOSCOPY

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BACKGROUND

Candida is present in the oral cavity of almost half the population and everyone who wears dentures will have candida (Pillinger, 2002). Factors that contribute to oral disease are dehydration, carcinoma, renal failure, and oxygen therapy (Peate, 1993), side effect of steroids, antibiotics, and immunodeficiency (Pillinger, 2002). The elderly are recognised as a potentially immunosuppressed group and old age is listed as a factor favourable to fungal colonization (Zwalinska-Weilso, 2001). Anecdotally the dentures of patients attending for endoscopic procedures are frequently noted by endoscopy staff to be inadequately cleaned.

Dentures increase candida colonisation and should be cleaned to remove food debris after each meal. They must be removed for soaking in a proprietary cleaner for 6hrs of each 24 hour period (Butz-Jorgensen et al, 1975; Firrola, 2001). This practice reduces the build up of fungi on the gums’ surface and on the dentures. If a break in the mucous membrane is sustained, e.g. from the plastic mouth guard or endoscope, this can act as a gateway for candida. The potential exists for this mucutaneous non-life threatening illness to progress to an invasive illness that may effect any organ.

AIMS

- 1) To raise awareness among endoscopy nurses of the potential risks to their patients from candida
- 2) To assess present knowledge of denture care

METHODS

Current denture-care practice on wards was assessed by distributing a questionnaire to a convenience sample of RGNs and HCAs. An audit of the cleanliness of dentures from 20 consecutive in-patients attending for upper endoscopic procedures was undertaken.

RESULTS

Dentures of 8 (40%) in-patients attending for endoscopy were classed "dirty". From 158 ward nurses (97 RGNs and 61 HCAs) surveyed 46% only soaked patients' dentures over night; 76% cleaned patients dentures once a day, 7% post prandially; as few as 25% routinely remove patients dentures prior to administration of oropharyngeal anti-fungal medication.

CONCLUSIONS

General education of nurses re denture care is needed.

DISCUSSION

Should endoscopy nurses look for clinical features of candidiasis, e.g. white plaques or cheilitis, and seek advice re postponement of procedure till anti-fungal therapy has been commenced?

PHYSICAL STRESS AND PATIENT SATISFACTION RELATED TO ENDOSCOPIC ULTRASONOGRAPHY.

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BACKGROUND.

We perform approximately 550 endoscopic ultrasonography (EUS) examinations per year. Eighty percent of the patients are evaluated in an out-patient setup and the patient's diagnosis are malignant in 60% of the cases. All patients receive a written information prior to the examination, and the procedure information is repeated by the nurse and the surgeon who are performing the EUS. The patients are informed of the results of the examination 2 hour after the procedure.

The physical stress as well as patient satisfaction related to the EUS procedure have never been prospectively evaluated.

AIM.

To evaluate the patient's perception of the physical stress of EUS and the level of satisfaction related to the information provided before and after the procedure.

METHOD.

300 patients were evaluated using a combined questionnaire and follow-up case sheet. The questionnaire included an evaluation of pain, anxiety, discomfort and information satisfaction. All patients were evaluated immediately after the procedure and again one week later. The nurse participating in the EUS examination were also responsible for the interviews.

RESULT.

A total of 293 patients (97.7%) fulfilled the inclusion criteria. Average examination time was 19 minutes. Five percent of the patients needed tracheal suction, 0.3% vomited and 0.3% aspirated; -however, none of these minor complications needed further treatment. One third of the patients reported of different complaints during follow-up; -the most common problem being a sore throat and non-specific abdominal pain. Overall, there were no statistical significant differences between the results obtained at the interviews. Four out of five patients had no or only slight pain and more than 95% had experienced no or only slight anxiety. In contrast, more than half of the patients complained of moderate to severe discomfort. At both interviews more than 90% stated that they were satisfied with the information provided in relation to the procedure, and 94.5% would accept a second EUS without any hesitation if necessary.

CONCLUSION.

A high level of satisfaction with the information provided before and after the EUS procedure combined with a low level of discomfort, pain and anxiety seem to explain why more than 90% of the patients were willing to have a second examination if necessary. A high level of patient information before and after the procedure is mandatory.

VALIDATION OF CUTANEOUS ELECTROGASTROGRAPHY AGAINST ANTRODUODENAL MANOMETRY IN ADULTS

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Electrogastrography (EGG) is the cutaneous recording of gastric electrical activity. However non-invasive and easy to perform, the value of EGG for diagnosing gastrointestinal motility disorders has not been proven. It is unclear to what extent changes in the electrical rhythm of the stomach are associated with disturbances of

gastrointestinal motor activity. This is a retrospective analysis of 185 simultaneous recordings of EGG and antroduodenal manometry (ADM) in patients with suspected motility disorders.

Methods: We used a water-perfused 8-channel catheter system for stationary manometry. Pressure data were stored at 4Hz online using a Polygraph/Polygram (Medtronic Synectics, Stockholm, Sweden). EGG data were recorded using an EGG-Digitrapper (Medtronic Synectics, Stockholm, Sweden). Recordings were done for 3 hours in the fasting state and for 2 hours after a standardised solid meal. We analysed the last pre-prandial hour and the first post-prandial hour of EGG after exclusion of artefacts. All recordings with at least 50% of the recording time left for analysis were included. EGG was analysed for percentage of normogastric (2-4 cycles per minute) rhythm during fasting (normal >70%); percentage of normogastric rhythm during fed motor activity (normal >70%); and power ratio of the dominant frequency (normal >1).

Results: Our study material consisted of 187 patients (151 females) with a median age of 46 (IQR 34-55) years. EGG was uninterpretable in 33 patients and another 26 patients with various organic disorders and post-operative states were excluded from the analysis. The remaining 126 patients of whom 34 had pseudo-obstruction or enteric dysmotility, 27 had slow transit constipation, 52 had irritable bowel syndrome, and 13 had gastroparesis, were divided according to manometry findings.

EGG finding	Manometry finding			
	Normal (n=76)	Abn. P3 (n=33)	Burst activity (n=38)	No fed response (n=8)
Normal EGG	62%	52%	47%	25%
Abnormal pre-prandial EGG	12%	27%	29%	75% ***
Abnormal post-prandial EGG	4%	15%	21%	38% *
Abnormal power ratio	24%	15%	18%	0%

Abn. P3=abnormal propagation or configuration of MMC phase-III; * p<0.05; ***p<0.001

Conclusions: EGG is a poor predictor of manometry findings except absence of motor response to food intake, in patients with gastrointestinal motility disorders. Rhythm disturbances seem to be uncommon even among patients with severe motility disorders.

THE FIRST TWO DANISH NURSE ENDOSCOPISTS- EXPERIENCE FROM A TRAINING PROGRAMME.

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A new diagnostic strategy for patients over 40 years of age with symptoms suggestive of colorectal cancer comprise sigmoideoscopy and occult blood in feces (Hemocult sensa). Our department perform 1600 sigmoidoscopies yearly which places a considerable burden on limited surgeon resources . In Denmark endoscopy is not done by nurses but we found it relevant to establish a training programme considering the experiences from UK and USA.

Objective: Evaluate if nurse sigmoideoscopy can be performed safely and with high patientsatisfaction

Method : Nurse A and B had 15 years and ½ year respectively of experience as endoscopy assistants. Two consultants with several years of endoscopy experience trained the nurses. First part was theoretical ; anatomy, physiology and pathology of the analcanal, colon and rectum. Second part was a walk through a sigmoideoscopy with tips and tricks using videotapes and drawings outlining landmarks and points of danger. Last part was a technical scrutiny of the video rack and trouble shooting. The practical part consisted of 4 modules . Module 1; The consultant retracted the scope according to instructions from the nurse (25 cases). Module 2; The nurse retracted the scope supervised by the consultant (25 cases). Module 3; The nurse inserted and retracted the scope supervised by the consultant (25 cases). Module 4 ; 2 days of computersimulated sigmoideoscopy. Finally a multiple choice test of 20 questions, each with 4-5 answers, were performed. The test was passed if eightteen of the questions were correct. After successful training the nurses started sigmoideoscopy on their own but the following were mandatory ; always rectal exam and looping in the rectum, always conferring pathological findings except diverticula with consultants, all examinations videorecorded and reviewed by consultant. After approximately 150 sigmoideoscopies each , a questionnaire on patientsatisfaction was performed over a 3 months periode (6th jan 03- 6th april 03) including patients examined by surgeons. Details on each nurse endoscopy ; insertions depth, time used and findings was noted .

Results : In the 3 months periode 69 sigmoideoscopies were performed by the 2 nurses (A: 19, B: 50). Left colonic flexur were reached in 81 % of the cases, however in the 13 cases where the flexur were not reached ; 3 had incomplete emptying of the bowel, 2 had a rectal cancer or huge rectal polyp, 3 had loop

formation of the sigmoid while no information were available for the remaining 5 patients. Thus technical problems were encountered in 12 % of the cases. The median time used were 25 minutes but in several cases waiting time for the supervising consultant were included. In two cases a rectal cancer and a huge rectal polyp were found . Reviewing of the video tapes did not cause any reexamination. Patients had lesser pain when nurses performed the sigmoideoscopy.

Conclusion : Nurse sigmoideoscopy can be performed safely with no complications , high completion rate and patient satisfaction .

THE ROLE OF GASTROENTEROLOGY/ENDOSCOPY NURSES IN PHYSIOLOGY TESTS

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BACKGROUND

Physiology is the science of normal function. Some disorders of the gastrointestinal (GI) tract cannot be diagnosed visually (endoscopically) or morphologically (x-ray). Nurses, with increasing frequency, complete gastrointestinal physiological tests. Gastroenterology/endoscopy nurses are seen as having the knowledge base, and being conveniently placed. They are frequently asked to complete the tests in addition to their other duties. The tests range from relatively simple breath tests for the detection of microbial disorders or malabsorption, to complex motor and sensory function testing of the GI tract. Clinical physiologists; clinical scientists; respirator/cardiac technicians; and/or research registrars as well as nurses complete these tests, in the UK. Nurses, in general, were offered no formal training to equip them for their extended role in GI physiology.

Technological advances and innovations are leading to more and more complex physiological investigations with interchange between disciplines and sectors. The multidisciplinary base for GI physiological investigation lead to the formation of a group, supported by the British Society of Gastroenterology (BSG), the Association of Gastrointestinal Physiology (AGIP).

OBJECTIVES

The main objectives of AGIP are the standardisation of education, training, continuing professional development and fitness to practice for healthcare professionals, with physiological, nursing or scientific backgrounds, who are actively involved in GI physiological investigations

METHODS

A constitution was formulated with membership of AGIP open to clinical practitioners who undertake diagnostic investigations on patients and those who have a continuing commitment to research and development of GI physiological measurements.

Criteria were drawn up for entry to trainee membership, affiliated membership or the Accreditation Register of AGIP. A code of professional conduct was introduced together with a statement of the standard to be achieved. Pathways for education and training were instigated.

OUTCOMES

AGIP is an integral part of the Registration Council for Clinical Physiologists (RCCP) whose application for state registration has been submitted. Nurses have been advised that they may retain dual registration with the Nursing and Midwifery Council (NMC) and RCCP. The oesophageal section of the BSG has fully supported the efforts of AGIP in the accreditation of professionals involved in GI physiology. The BSG, together with AGIP are reviewing the guidelines for oesophageal manometry and 24hrpH studies. The National Occupational Standards (NOS) group have also supported the efforts of the group.

The “grandparenting” scheme, that enables previous experience to be recognised, has ensured a core of experienced professionals. Standards of practice have been set with guidelines for

1. pre-procedural preparation of patients
2. performance of investigations
3. analysis and technical reporting of data measurements
4. provision of a safe working/clinical environment
5. maintenance of records
6. management of implanted devices
7. evaluation, procurement, calibration and quality control procedures for all equipment

In addition AGIP has liaised with the education providers to facilitate provision of appropriate courses including a specialist option course appropriate to RGNs, with placements in accredited training units where necessary.

GI physiological investigations have become an accepted role for a number of gastroenterology/endoscopy nurses. Appropriate training courses exist. Personal and unit criteria must be met to validate practice. Should

these changes in practice/education become pan-European to facilitate standardisation of international GI physiological investigations?

New endoscopic developments (one step button) can be more cost effective as well as patient friendly.

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The Netherlands are known for eminent but difficult to finance healthcare. Hospitals are sternly budgeted and the possibilities for medical development are becoming less. Top clinical research without new endoscopic developments is inconceivable. The department of Gastro-enterology of the University hospital in Rotterdam initiated a trial to investigate the cost effectiveness and patient comfort of the “one step button” gastrostomy catheter.

Trough a normal endoscopic procedure the patient receives a button throughout the first placement of the gastrostomy catheter. The placement kit consists of a percutaneous measuring device, a “one step button” gastrostomy-kit and a patient care kit. During gastroscopy the right place for gastrostomy is chosen. Before placement of the catheter the abdominal wall-thickness has to be measured by a separate delivered device. Thereafter the right size gastrostomy set can be place by “pull-technique”. Several sizes and lengths are available.

This method shows the advantage of creating a normal fistal and placing a button in one procedure (no replacement). The department of Gastro-enterology treats patients with this new method and compared the differences between the consisting and new method.

Conclusion: the “one step” endoscopic procedure probably has a clear advantage for patient comfort (only one endoscopy), cost effectiveness and on replacement .

OPEN ACCESS GASTROSCOPY-IS IT THE BEST USE OF RESOURCES?

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Objectives: To assess the effectiveness and appropriateness of the open access gastroscopy service in the context of recent guidelines and the “two-week wait”.

Background: Open access gastroscopy has been available in our trust to GP’s since 1996. The original referral criteria include restriction to patients over 45years of age. It has been perceived that many referrals are inappropriate and do not meet our referral criteria. The British Society of Gastroenterology Guidelines for the Management of Dyspepsia (2002) suggest that gastroscopy is unnecessary in the majority of patients under 55 years of age. Currently 2 endoscopy lists per weeks are dedicated to open access endoscopy in our unit; performed by the Nurse Consultant Gastroenterologist and a Trust physician. A fast Track service (2 week cancer wait) has been up and running for 3 years and has a 10% pick up rate for malignancy.

Methods: Data was collected from the computerised Endoscopy Records System (ERS). Data for the last 3 years was analysed with respect to the pathology identified, the age of the patient and the referral criteria.

Results:

Year	Total number of gastroscopies	Open Access Gastroscopies	Open access <55 years of age
1996	2769	493	
1997	2645	486	
1998	2885	461	
1999	2847	406	
2000	3301	569	300 (52.7%)
2001	3277	459	233 (50.8%)
2002	3356	320	164 (51.3%)

From 2000-2002 1384 open access gastroscopies were performed, out of a total of 9934. 697 (52%) were in patients under 55 years of age. Only three cancers (0.2% of procedures) were detected via open access gastroscopy. 10 benign gastric ulcers (0.7% of procedures) and 36 duodenal ulcers (2,7% of procedures) were detected, and 22 cases of severe oesophagitis or benign strictures (1.7% of procedures).

Summary and conclusions: The majority of open access gastroscopy referrals detect no significant pathology and would not influence management. Half were undertaken in patients <55 years of age and would not meet current referral criteria. All cases of cancer detected would have met Fast Track criteria (and would have been endoscoped within 2 weeks rather than the 8-12 weeks waiting time for open access endoscopy during the study period). A “test and treat” policy for H pylori negative patients would have been appropriate for patients under the age of 55.

We conclude that open access endoscopy is no longer appropriate in the context of the 2-week fast track service for suspected upper GI cancer. This endoscopy time could be used to reduce waiting times for other procedures. A nurse-led dyspepsia service, using evidence-based treatment algorithms, would provide a more effective and efficient way of managing the large numbers of young dyspeptic patients.

MEETING TARGETS WITHIN ENDOSCOPY

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BACKGROUND

University Hospital Aintree is a large teaching hospital serving a population of 330,000. The endoscopy unit accommodates four theatres. The nursing staff compliment is one unit manager, one deputy manager, ten staff nurses (5D/5E grades) and six health care assistants together with four nurse endoscopists and one gastrointestinal bleed nurse specialist. A National Endoscopy project was established in 2001 to identify good practice, ensure delivery of NHS Cancer Plan, which entailed rapid access to endoscopic services, and deliver timely patient access.

OBJECTIVES

1. Reduce active waiting list from up to 26 weeks to under 13 weeks by March 2003
2. Increase activity to fully utilise resources
3. Reduce DNA rate from approximately 20% to less than 2% by March 2003
4. Achieve a 5% rate of cancelled sessions and late starts by March 2003
5. “Booked admission” for daycases (date discussed with patient) from 20% to 100% by March 2003
6. Co-ordinate a maximum 31 days journey, from referral to diagnosis, for cancer patients
7. Enable patients to identify areas for change
8. Achieve 5% in-patient cancellation rates
9. Reduce up to 5 day waiting time for endoscopy of in-patients with gastrointestinal bleeds

METHODS

Activity was matched to demand with a more flexible approach to timetables, for example increasing the number of colonoscopies by reducing number of gastroscopies as required. “Waiting list initiative”, Saturday lists, was undertaken when required. An extended working day was introduced, two additional lists from 17.00 to 20.00 four days a week with designated lists for in-patients. A flexible job plan for nurse endoscopists was introduced to enable them to cover lists when medical staff had holidays. Late starts were monitored to identify trends and instigate effective timetable management. Booked admissions programme was introduced gradually. Confirmation clerks, who contact patients to confirm acceptance of appointment, were employed.

We worked with GPs to ensure appropriate referral routes were used. On-going monitoring of rapid access list distribution, as per NHS cancer plan, was undertaken to ensure sustainability of designated lists. A number of suggestions from patients were acted upon, e.g. purchase of newly designed theatre gowns to maximise patients’ dignity. The booking system for in-patients was revised with a confirmation letter of date and time being sent to both the patient and the nurse in charge. Nurse endoscopists facilitated endoscopy awareness sessions to improve communication with ward staff. A gastrointestinal bleed nurse, who triages any in-patient from A&E or wards, has been introduced.

OUTCOMES

All endoscopy waiting times are below 13 weeks. There has been an increase in overall activity from 13,000 2000/2001 to 16,000 procedures 2002/2003. The DNA rate has been reduced to 7%. Cancelled sessions have been cut to 3% with late starts now 8%. Seventy five percent of day-cases are currently classed as booked admissions. The 31 days requirement from referral to diagnosis for cancer was achieved for 96% of oesophagogastric and 93% colorectal patients. In-patient cancellations were halved to 8%. One hundred percent of patients with GI bleeds were endoscoped within 24 hours of admission.

The continual audit of activity has by now become automatic and the staff has adjusted well to the extended working day even enjoying a lie-in on the late shift days.

THE COMPUTER FOR MANAGING THE ENDOSCOPY UNIT

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In the last decades high quality demands are required in hospitals and the computer can be a tool for this purpose. Several computerised systems became also for the endoscopy unit available but mostly for composing a report only. Several guidelines for the practice of endoscopy have been published recently for example about the cleaning and disinfection of GI endoscopes or the guidelines for preparation or guidance the patient undergoing an endoscopy. In the near future we have to register all these procedures.

Since several years we use ENDOBASE at our endoscopy department for reporting the endoscopic findings by the use of Standard reports, Textblocks and MST. To all reports diagnose codes (based on ICD-10) are linked automatically. Besides these reports all patient and examination characteristics are stored in the database. With the statistics module all stored data can be queried for medical and management information.

In our system we can continuously register the general patient care, such as heartrate, blood pressure and oxygen saturation during (and preferable during the first hour after) an endoscopy. These data are continuously stored in the database coupled to the patient data and examination data.

Reprocessing information of scoops is registered and incorrect procedures are reported. Because scoops are coupled to the examination and patient it is easy to trace all patients who have been treated by an infected scoop. Time of maintenance and repairs can also be stored into the system and the system detects automatically when equipment needs to be checked. The hygienist can also store biological test results (of the cleaning and disinfection machines) into this module. So there is a perfect overview of the status of all equipment.

Managing the stock of all endoscopy materials such as forceps can be integrated in this system with automatic alerts if the article has to be supplied.

Via HL7-standards information can be imported from (patient data and Scheduling data) and exported to (reports, financial coding) the Hospital Information System. It is also possible to view the patienthistory all over the hospital via a webbrowser (EndoView).

Because the total endoscopy procedure is monitored and stored in one database, it makes for the nurses very easy to search for all possible information of endoscopy. Patient information are well organised, reports can be easily viewed and reprinted, managing and calculation of the stock is computerised and quite effective.

Since the introduction of this system in our hospital we have experienced this is an efficient system that saves time for the nurses. The system itself and the time saved have lead to an improvement of the quality! Mistakes are nearly impossible anymore.

Conclusion:

Managing an endoscopy unit needs more than only a report writing system. Working with a total computerised system makes it possible to register all important procedures at an endoscopic department resulting in better information. Using a computerised system guarantees the quality of endoscopy and patient care.

Endoscopic treatment of Barrett : Detection and treatment of early esophageal cancer.

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The incidence of esophageal cancer has changed dramatically the last four decades: whereas the incidence of squamous cancer has showed a slow but steady decline, the incidence of esophageal adenocarcinoma has increased over 350% making it the fastest rising cancer in the Western world.¹ In everyday clinical practice, most cases of cancer are detected at an advanced stage as a result of lesion-related symptoms. The prognosis for the advanced cancer patient is still poor, even when major surgery with extensive lymph node dissection is carried out, in combination with the various forms adjuvant therapy. To improve the prognosis of esophageal cancer patients, the cancer needs to be detected at an early stage and treated before lymph node metastasis occur.²

In this lecture, we will outline the detection and treatment of early forms of esophageal cancer. Which patients are at risk for developing these cancers? What endoscopic technique should be used to detect early lesions? What endoscopic treatment options are available?

Whereas esophageal adenocarcinoma has an identifiable precursor lesion (i.e. Barrett's esophagus), the majority of squamous cancers do not develop from known precursor states. Risk factors for squamous cancers include: high age, alcohol and/or nicotine abuse, previously treated head-and-neck cancer, ionizing radiation, human

papilloma virus infection, long standing achalasia, prior esophageal lye damage, and rare diseases such as tylosis palmaris.

Screening studies in several of these risk groups have found squamous cancer in three to fourteen percent of patients.³⁻⁵ There are, however, no currently accepted standards which of these risk groups should be screened or surveilled. With standard endoscopic techniques early squamous esophageal cancer is very difficult to detect. Lugol staining (1.5 –3.0%) is a simple and very effective technique that greatly enhances the detection rate of dysplastic squamous lesion.⁶ In addition, it outlines the margins of lesions, facilitating endoscopic treatment. For detection of early lesions in Barrett's oesophagus several endoscopic techniques have been studied. Methylene blue staining is currently the only technique that has been shown to increase the detection rate of Barrett's dysplasia.⁷ The technique is however cumbersome and operator dependent. High-resolution endoscopes enable close inspection of the Barrett's mucosa. Recently, a mucosal pattern classification, comparable that used in the colon, has been proposed.⁸ Combining high-resolution endoscopy with contrast staining agents (indigo carmine or crystal violet) may further enhance the mucosal contrast. Other optical techniques such as fluorescence endoscopy, optical coherence tomography and narrow band imaging are still investigational.

Most studies on endoscopic treatment of early esophageal cancer come from Japan and relate to squamous cancers.⁹ Several prospective uncontrolled series are available; some with a retrospective surgical control group. Data suggest that endoscopic mucosal resection equals surgery in terms of effectively removing cancerous lesions but carries less complications.¹⁰ For Barrett's cancer only uncontrolled series are available.¹¹ The ideal candidate for endoscopic treatment has a solitary lesion less than two to three centimetres in diameter, a type I, IIa, or IIc, (>1 cm) lesions and no signs of submucosal infiltration or local lymph node involvement on endoscopic ultrasonography.¹¹ Endoscopic mucosal resection with the cap technique is the best-documented endoscopic technique for removal of these lesions.¹⁰ Histological examination of the resected specimen subsequently guides further management. The risk of lymph node involvement is less than 5% in mucosal lesions whereas it increases to 25-40% in lesions with submucosal infiltration. Recent studies suggest that for minimal submucosal involvement (sm1) an expectant management is also acceptable.¹² For deeper invasion or irradiated deeper resection margins, however, additional treatment is to be advised (surgery or radiotherapy for selected cases).

For patients with positive lateral resection margins, additional treatment may consist of local thermal ablation using APC, laser, or -as in Barrett's esophagus- photodynamic therapy.¹³ After successful endoscopic treatment strict endoscopic follow-up is required to detect metachronous lesions at an early stage. This holds especially for Barrett's lesions, where an underlying mucosal field defect may be present.

References

- (1) Devesa SS, Blot WJ, Fraumeni JF, Jr. Changing patterns in the incidence of esophageal and gastric carcinoma in the United States. *Cancer* 1998; 83(10):2049-2053.
- (2) Van Sandick JW, van Lanschot JJ, ten Kate FJ, Offerhaus GJ, Fockens P, Tytgat GN et al. Pathology of early invasive adenocarcinoma of the esophagus or esophagogastric junction: implications for therapeutic decision making. *Cancer* 2000; 88(11):2429-2437.
- (3) Petit T, Georges C, Jung GM, Borel C, Bronner G, Flesch H et al. Systematic esophageal endoscopy screening in patients previously treated for head and neck squamous-cell carcinoma. *Ann Oncol* 2001; 12(5):643-646.
- (4) Meyer V, Burtin P, Bour B, Blanchi A, Cales P, Oberti F et al. Endoscopic detection of early esophageal cancer in a high-risk population: does Lugol staining improve videoendoscopy? *Gastrointest Endosc* 1997; 45(6):480-484.
- (5) Shimizu Y, Tukagoshi H, Fujita M, Hosokawa M, Kato M, Asaka M. Endoscopic screening for early esophageal cancer by iodine staining in patients with other current or prior primary cancers. *Gastrointest Endosc* 2001; 53(1):1-5.
- (6) Inoue H, Rey JF, Lightdale C. Lugol chromoendoscopy for esophageal squamous cell cancer. *Endoscopy* 2001; 33(1):75-79.
- (7) Canto MI, Setrakian S, Willis J, Chak A, Petras R, Powe NR et al. Methylene blue-directed biopsies improve detection of intestinal metaplasia and dysplasia in Barrett's esophagus. *Gastrointest Endosc* 2000; 51(5):560-568.
- (8) Endo T, Awakawa T, Takahashi H, Arimura Y, Itoh F, Yamashita K et al. Classification of Barrett's epithelium by magnifying endoscopy. *Gastrointest Endosc* 2002; 55(6):641-647.
- (9) Fujita H, Sueyoshi S, Yamana H, Shinozaki K, Toh U, Tanaka Y et al. Optimum treatment strategy for superficial esophageal cancer: endoscopic mucosal resection versus radical esophagectomy. *World J Surg* 2001; 25(4):424-431.
- (10) Ell C, May A, Gossner L, Pech O, Gunter E, Mayer G et al. Endoscopic mucosal resection of early cancer and high-grade dysplasia in Barrett's esophagus. *Gastroenterology* 2000; 118(4):670-677.
- (11) Technology status report evaluation. Endoscopic mucosal resection. *Gastrointest Endosc* 2000; 52(6):860-863.
- (12) Shimizu Y, Tsukagoshi H, Fujita M, Hosokawa M, Kato M, Asaka M. Long-term outcome after endoscopic mucosal resection in patients with esophageal squamous cell carcinoma invading the muscularis mucosae or deeper. *Gastrointest Endosc* 2002; 56(3):387-390.

- (13) Gossner L, Stolte M, Sroka R, Rick K, May A, Hahn EG et al. Photodynamic ablation of high-grade dysplasia and early cancer in Barrett's esophagus by means of 5-aminolevulinic acid. *Gastroenterology* 1998; 114(3):448-455.
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News from Industry - Olympus

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In the area of Endo Therapy Olympus offers a wide range of disposable products.

Olympus and Terumo have jointly developed a guidewire for digestive endoscopy of the pancreas and bile duct. The Naviguide is a multi purpose combination wire for use during ERCP procedures. The wire is made from Nitinol, which ensures that the wire is kink resistant through even the most tortuous angles. A 10-cm section of the tip of the guidewire has a hydrophilic polymer coating which increases its passability when in contact with body fluids or water.

In the field of stone extraction balloon catheters Olympus launched the multi 3 Extraction Balloon. This innovative disposable balloon can be inflated to three different diameters (balloon sizes of one balloon: Ø 8.5, 11.5, 15 mm) depending on the clinical need. Three preloaded syringes are included to select the appropriate size of the balloon.

The newly developed disposable SnareMaster in a soft version adds to up the current line up.

In the area of cleaning brushes, Olympus has a new disposable brush the BW 200T with a working length of 2200mm and is compatible to channel diameters of 2.0 to 4.2mm.

GI

Olympus (also) offers several new GI highlights like ScopeGuide, the 3D navigation system, built to increased patient comfort as well as to shorten insertion time during colonoscopy. The new gastroscopes GIF-1TQ160 and GIF-XTQ160 with a 3.7 and 6.0mm working channel respectively are now completing the EXERA range of therapeutic instruments, while the Olympus PSD-60 Endoplasma unit has been especially designed to provide electro cautery and argon plasma coagulation tailor-made for Endoscopy.

EUS

EUS News: Olympus has recently launched the disposable EUS-FNA needle system, EZ Shot and is offering two new EUS endoscopes (GF-UC160P-AT8 and GF-UCT160-AT8) that can be connected to the high-end Philips HDI 5000 ultrasound system. Major medical benefit for staging of lung cancer is expected from introduction of the world's first bronchoscope for EBUS-TBNA.

ETD

Olympus launches the ETD3 and sets a new standard in the fully automated and validated reprocessing of endoscopes as the only "true system supplier" in endoscopy

The ETD3 is fitting all customer needs through the availability of four models: customer choice between conventional Glutaraldehyde or Peracetic Acid based reprocessing and between the ETD3 plus including automatic channel flow control and endoscope identification or the ETD3 basic without flow control and endoscope identification

With the introduction of the Peracetic Acid based reprocessing the cycle time is significantly reduced to less than 30 minutes and the risk of protein fixation in the channels or on the outer surface of endoscopes is eliminated

Remote access via ISDN modem secures an increased uptime of the ETD3 at reduced service costs

All parameters of the ETD3 process can be documented automatically ensuring hygienic- and legal safety.

News from Industry – Pentax

PENTAX Europe GmbH, Daniela Janell

New Technologies in the Field of Endoscopy for Improved Early Cancer Diagnosis

It is still necessary to identify and biopsy pre-cancerous tissue changes, and finally to analyse them histologically with a microscope, by means of image generating endoscopy. PENTAX is working on the development of new, innovative technologies which simplify diagnosis. The basis and the driving force behind all new developments advanced by PENTAX is many years of experience and expertise in digital technology, as well as in the field of precision optics.

PENTAX Cooperative Effort for the Development of "Optical Coherence Tomography"

Since the year 2000, PENTAX has been working in cooperation with LightLab Imaging Inc. in Boston on optical coherence tomography (OCT) technology in the field of endoscopy. The development of OCT will serve

to identify microstructures in gastroenterological and pulmonological applications. OCT combines the simple technique of ultrasonography (US) with microscopic image quality. As opposed to US, however, the images are not generated through the use of sound waves, but rather light waves. With the help of infrared light, image resolution can be improved 8 to 25-fold as compared to US. This extremely high resolution makes it possible to see even the smallest tissue changes **within** the mucosa.

Confocal Endoscopy in the Field of Gastroenterology

PENTAX has entered into a joint venture with OptiScan Imaging Ltd. in Melbourne in 2002 in pursuit of its second research emphasis, namely confocal endoscopy. The technology is utilized, for example, in early detection of intestinal cancer. Laser light is applied directly via the endoscope, and microscopically accurate real-time images of living cells can be generated in thousand-fold magnification.

Bundled laser light is focused on the tissue in order to generate these images. The light beam is reflected by the outside surface of the tissue in the intestine, and is transmitted by means of confocal fibre optics which only conduct light from a specified focal plane to the processor. The light signals which arrive at the processor are transformed into images. Thanks to thousand-fold magnification of the tissue structures, microscopic images are obtained which allow for the recognition of structures all the way down to the size of cell nuclei. In order to better differentiate and identify tissue structures, the surface of the mucous membrane is first stained with a fluorescent contrast agent.

A reduction in the number of specimens taken for histological analysis is also anticipated as a result of the use of this technology. Early detection of intestinal cancer will thus be significantly facilitated.

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MANAGEMENT OF AN ENDOSCOPY SUITE

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Introduction With the development and propagation of fiber-optical endoscopy there is an increase of therapeutic possibilities and methods. These become more and more complex and time-consuming. Likewise organisation and management of the endoscopy suite becomes more demanding. Therefore the job profile for the head of endoscopy suites has become more demanding with regard to specialist knowledge, material expertise and continuing education.

Aim of this study is to point out the growing complexity of structures and procedures and the increasing demand on management skills for the head of an endoscopy suite.

Method: Analysis of annual reports of the endoscopy department of a tertiary university hospital. Analysis of the development of the workload and the personnel key for registered nurses as well as for physicians. Practical examples from the everyday life.

Results: The amount of endoscopic procedures has substantially rose. The team also grew, but on a lower rate. The time expenditure per investigation has developed inconsistent. The units became more complex and diversified

Conclusion: By the increasing complexity and the rising number of investigations the demands on the job profile of the head of endoscopy suites grew in the past years continuously. This challenge can be met only by professional management open to innovations, with a need to flexibility and a sense of practicability.

How to optimise the schedule for endoscopy procedures? OPTIMIZING THE ENDOSCOPY PROCEDURE SCHEDULING Marie-Paule LEBRET, Thérèse KIEFFER (GIFE FRANCE)

Introduction:

Quality of care in endoscopy rimes with safety, efficiency for the patient and the whole team. Procedure scheduling is a crucial point in quality management of endoscopy care. The patients' well being must be a prioritised objective. However in a competitive healthcare setting other criteria have to be met. The aim of this presentation is to suggest possible ways of harmonizing different aims toward better patient care.

Summary :

The main objective of procedure scheduling in the endoscopy setting is patient satisfaction based on quality of care. To achieve this different criteria have to be taken into account during procedure scheduling.

1/ Patients:

History

Possible infections (in France a priority is given to KJD)

Indications of procedure

Personal habits and needs.

2/ Multidisciplinary team:

Availability

Communication

Individual habits and needs.

3/Endoscopy rooms

Adapted to specific procedures

Availability of equipement and surroundings

4/Scopes

Number of procedures related to number of scopes available

Respect of scheduling decisions

Scope repairs information

Information and communication in the team

5/ Disinfection setting

Schedule on the wall

Sufficient number of scopes for the day

Ongoing information on schedule changes

6/Other equipement

Sufficient

Rigorous management of stock orders

7/ Scheduling staff

Training

Complete information about patients (history....)

Communication with the rest of the team(verbal, written, computer, fax)

Conclusion:

A serious preparation of the endoscopy procedure schedule taking into account the above mentioned criteria will develop quality of care to patients.

Bullying (Harassment, Mobbing) at work - a problem to solve?

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Harassment (Mobbing) at work

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The deep changes registered in work organisation are associated to an increase of work load and, as a way of achieve more productivity, workers are been forced to perform new exigencies. Those changes affect workers health negatively and generate new risks less visible but no less dangerous. A wrong work-organization influences worker health as well as worker behaviour and produces psycho-sociological risks, like violence at work and specifically harassment at work.

Mobbing or harassment at work is a part of a wider phenomena: violence at work. This concept goes further that physic violence, and includes other intimidating conducts. So, violence at work place would include, in addition to the physical aggressions, abusive and threatening verbal or physical conducts.

The English term "Mobbing" can be translated to Spanish like "Acoso" (harassment) to describe situations where a person becomes the target of the group to which he or she belongs, being persecuted by it. That produces important health problems, as much physical as psychic, being necessary in many cases the physical and psychological attendance.

As opposed to the dominant approach in mass media on the mobbing at work, that exclusively indicates it like a problem of victim and pursuer personality, our approach locates its origin in work organization problems. For that reason, next to the individual solutions it is necessary to confront the problem proposing and impelling deep changes in the enterprise strategies of the work force management.

It is clear that the psycho-social environment quality is an important mobbing cause. Conflicts between functions, lack of interesting and stimulating work, negative climate between co-workers gives rise to situations that drive to a high risk of mobbing.

But far from the positions that consider the mobbing like a problem whose nature is exclusively of personality, mobbing can and must be prevented like any other factor of risk at work, through the legally established instruments for it. In this sense, the psycho-social risks evaluation articulates a key piece for the prevention, since it allows the detection of organizational problems in the companies and therefore facilitates the adoption of suitable solutions.

Mobbing consequences have different nature and can be projected on different scopes, since not only the worker health undergoes the effects of the harassment, but the own organization, the family, and the society in general will be affected.

Quality assurance by endoscopy standards - security for patients and staff

Michael K. Ortmann, Ludwig T. Heuss

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Introduction In Switzerland so far existed no generally accepted, structured standards for endoscopy nursing. Since 2003 a working group the SVEP/ASPE is developing standards for the gastroenterological and pneumological endoscopy following the standards of the WHO (1984) and the DBfK (1995).

It is the **Aim** of the project to develop standards, which correspond to the specific conditions and needs of the Swiss health care system and keep to the qualitative regulations of the EU. After an assumption by the national committees these standards could serve, as basis for certification procedures of endoscopy units in hospital and private practice as well. At the same time they form the basis, for the technical training for medical practice assistants and registered nurses in endoscopy.

Method: Three working groups were formed with one group responsible person each. Subsequently, the standard topics were provided, which specified both the order and the time framework. Two standard variants were presented to the working groups as example. The groups compiled their drafts independently. After a first correction by the responsible persons of the SVEP/ASPE these standards are sent to the national specialist societies for gastroenterology and pneumology for revision.

Results: until September 2003, the following standards were completed : upper GI: diagnostic, upper GI: therapeutic, lower GI: diagnostic and bronchoscopy: diagnostic.

Conclusion: The technical developments in endoscopy demand permanent changes, to which the individual nurses and assistants have to adapt. Procedural standards should not be taken over uncritically for all times and situations. If they are to describe the current international and national requirements of practice they have to be critically analysed and regularly adapted.

What qualification is needed for endoscopy nurses - a research project ENDOSCOPY NURSES: What training? What recognition?

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Introduction:

Endoscopy nursing has developed alongside with scientific progress in the design of endoscopes and medical skills. Specific tasks and thus knowledge and training are under the responsibility of nurses working in the endoscopy setting. Throughout the world this has been verified and on a European level ESGENA has worked over the past 4 years on a European job profile and core curriculum for endoscopy nurses. This study aims to analyse the situation of endoscopy nurses in France compared to some other European countries member of ESGENA.

Study method:

To answer the following question:

“In France does endoscopy nursing care come under the responsibility of general care nurses specifically trained in this field, or operating theatre nurses, or do we have to create a new professional category of nurses?”

The following method of research was used:

Hypothesis:

The situation of endoscopy nurses in France is unofficial because of political and economical reasons but essentially because of the difficulties of nurses representation in endoscopy and on national basis.

Enquiry:

250 questionnaires on training needs of French endoscopy nurses (2000)

50 questionnaires to French endoscopy nurses on why and how they wish to validate their specific competencies

3 interviews of OR nurses

6 interviews to the nurse representatives of 6 European countries of ESGENA.

Interviews of nursing directors

Interviews of gastroenterologists

Analysis of French laws concerning nurses' professional responsibilities

Results:

The recognition of endoscopy nurses in France is at a stand still despite the wishes of a big number of this nursing category. The situation should develop either by the assimilation of endoscopy nursing to operating nursing or following the European trend the situation could remain a mix of different categories of nurses working in endoscopy with a possible common level of training as recommended by the European Endoscopy Nurses Education Workgroup.

ETHICAL ASPECTS OF COLORECTAL CANCER SCREENING (CRCS)

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INTRODUCTION:

Colorectal Cancer is the 2nd most common cancer in the Western World. Most Colorectal Cancers are slow growing and are potentially preventable if (pre-malignant) adenomatous polyps are removed, and curable if cancer is found early (i.e. localised to bowel wall) and removed by polypectomy or surgery. Therefore the WHO has stated that "Screening for Colorectal Cancer is justified"(1). The British Department of Health has now established Pilot Sites for CRCS by FOBT (2) and in the USA screening for all persons aged 50 and over has been established with faecal occult blood testing (FOBT) annually, +/- sigmoidoscopy every 5 years (3) or Colonoscopy every 10 years (AGA). Since 2002 Germany and Italy are carrying out CRCS by Colonoscopy. Although the early diagnosed individual benefits greatly from CRCS the ethical implications on society as a whole has not been considered.

AIM

To look at the Ethics of Colorectal Cancer Screening in terms of the 4 Principles: Benefice, Non-maleficence, Justice and Respect for Autonomy

Benefice – Do Good

There is no doubt that patients who are diagnosed early will benefit hugely. But healthy people who are found to have no cancer and are not at increased risk will not benefit.

Non-maleficence (above all – do no harm)

There are several methods available for CRCS: Faecal Occult Blood Testing, Sigmoidoscopy and Colonoscopy. Each of these methods has its own advantages and disadvantages. The more invasive and the more accurate the method is, the more likely is the potential for harm. This may be justified if a cancer is suspected but must be questioned if a potentially healthy patient is put at risk. There is some evidence that patients who have undergone CRCS may be at increased risk of cardio-vascular death. Apart from the harm that can be done from the invasive procedures, patients may suffer emotionally while waiting to hear if they have got cancer or not.

Justice

Screening also has major implications with regard to resource allocation. In the UK the cost per Cancer detected per life year = £10 000 (£20 000 for 2 life years). This cost may even be an underestimation. Moreover Screening by Colonoscopy with 60% uptake will require 10,000 extra Colonoscopy Sessions. This invariably will contribute to an increase of waiting lists and deprive patients with suspected colonic diseases early investigations. If more resources are put into screening other areas of healthcare may suffer. Cost anticipated in the UK in 1998 = £ 40 Million Pounds/year for Screening FOBT bi-annually. Individuals therefore are being used as a means to an end as 1000 people would have to be screened by FOBT for 10 years to prevent 1 death from Colon Cancer (Marshall 2000). There are chemo and dietary preventative measures available which have been shown to be beneficial with regard to cancer prevention. Resources would be better spent on health education, as these measures will also protect from other diseases, including cardio-vascular diseases.

Respect for Autonomy

When patients have symptoms they initiate consultation. However, screening means that health care professionals initiate contact, without the consent of the patient. Non-compliance with screening may have future implications as insurance companies may refuse to pay for cancer treatment if patients had refused screening.

Summary

Screened populations tends to be healthier and have lower rates of mortality for all causes (Gates 2001) – therefore gains from screening may be overestimated. Claimed benefits may have been also overstated as the 2 anticipated life years gained may refer just to earlier diagnosis (time lead bias). Earlier Diagnosis may lead to additional 2 years of investigations and worry without any increased life expectancy - Earlier might therefore not be better (time led bias). Resources needed may be better spent in Public Awareness and Health Education Programmes, Primary Care or on Research for blood tests or a magic bullet, etc.

CONCLUSION

CRCS although of benefit to the early diagnosed patient offers limited benefit to the population at large. CRCS may cause harm and even death in an unaffected population. Resources will have to be withdrawn from other health care facilities to benefit a few. CRCS is using an individual as a means to an end and does not Maximise Happiness.

Therefore population CRCS with the presently available means is not ethically justifiable

1. Winawer SJ, St John DJ, Bond JH, Rozen P, Burt RW, Waye JD, et al. Prevention of colorectal cancer: guidelines based on new data. *Bull World Health Organ* 1995;73:7-10
2. National Screening Committee. A Summary of the Colorectal Cancer Screening Workshops and Background Papers. DoH Sept. 1998
3. US Preventive Services Task Force. Guide to clinical preventive services. 2nd ed. Baltimore: Williams & Wilkins, 1996: 89-103

RELATIONSHIP WITH PATIENTS: HOW CAN WE IMPROVE EMPATHY?

AMPARO MARCO-GISBERTCASTILLO 8 PTA 1646100 BURJASSOT VALENCIA

Nursing is characterized for being a profession of services that provides care applying the knowledge and specific techniques from its discipline. In the daily work of our profession, we frequently experience the need of acquiring knowledge, skills and attitudes. The need of an emotional and human competence to manage fluently and efecacily the relationship with patients and make it a useful instrument.

In the last three decades, Empathy has been recognized as an appropriate, desirable, therapeutic and central component in the alliance nurse-patient. Infirmiry educates have universally accepted it and they have incorporated the empathy educational model in the infirmiry studies plans.

Empathy is an attitude or an interior willingness but it is also communication ability, and in the way it works, it is a key element to help us. The use or not of the empathy by professionals from the infirmiry branch will affect the results that would be obtained with the patient. This could concentrate on the person and not only on his pathology.

There are debates in relation to how better to conceptualize the empathy: it can be a dimension of the personality, a felt emotion or an observable skill.

A simple empathy requires the therapist ability to feel the “private world” fo the patient as if it was his/hers. It also needs the ability of springing feelings and the oral gift to communicate this understanding in a language in tune with the patient’s feelings.

It exists the need of creating an empathy measure that would value what nurses should do during its relation with patients. It would also be useful as a teaching tool and a new learning way.

The Role of the Nurse Educator

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In today's constantly changing health care environment Kim's typology's conceptual domains in nursing - client, client-nurse, practice, and environment help nurses focus on nursing realities and gives basis for examining scientific knowledge while focusing on the professional role of nursing. When educating patient the nurse-client domain is crucial and client-nurse relations is seen as human-to-human engagements with client and nurse as participants.

Developing nursing practice demands a long term commitment, skills, knowledge, and support to the achievement of best practice. Compassion, competence, confidence, conscience, commitment, courage and assertiveness are personal attributes of the professional identity of the nurse, which are connected with the caring legacy of nursing. Accordingly, development of the professional identity of nurses could be understood as professional and personal growth in caring, which implies moral maturity.

Giving information and patient education are integral to nursing roles. There is a need for health professionals to aid patients' access to high quality, evidence based written and oral information and education and to provide it to patients effectively. There is evidence that well-informed individuals are better able to manage their health and treatment, have better psychological outcomes and have fewer exacerbations of their condition and fewer hospital admissions.

In today's conditions staff educators role is seen as nurse/professional, educator/teacher, consultant /counsellor, coordinator/facilitator, change agent/motivator, opinion leader and evaluator/researcher. The role includes responsibilities, climate setting, communication, collaboration, and role development. Roles may be expanded by participating in committees across the hospital, focusing on perceptions of other staff outside own department. Keywords in staff development are educational goals within the framework of the strategic plans and mission of the institution. Effectiveness is achieved through careful planning, thought, and professionalism and application of the nursing process and learning theories to staff education. The consultation role and the importance of fostering a climate enhance professional growth. Research, resources, record keeping, and publication are recognized as additional components of the nurse educator role.

Nurses requires a variety of skills, as well as consideration of a range of influences on teaching and learning, sound knowledge of the topics discussed and resources available to support this information. The nature of what is given or said should be informed and evaluated by context and an appreciation of the patient's needs and readiness to deal with new information so that information seems more sensitive and timely, and may maximise its impact on patients' well being. Nurse should recognise the difference between giving information and education. Giving information can be a passive process, with no confirmation of whether the information is understood or how it has been received. Education, by contrast, implies a more active process, with confirmation that learning has taken place. Giving information is, therefore, only part of the process of patient education. Nonetheless, skilled information giving is still needed for education to be effective. In the future nurses need more and more computer technology to provide new solutions to patient education and to update their own education in practise.

REFERENCES:

- Caress, A-L. 2003. Giving Information to Patients. *Nursing Standard* 17(43) 9, pp 47-56.
- Edmond, CB. 2001. A New Paradigm for Practice Education. *Nurse Education Today* 21(4), pp 251-259.
- Fitzsimmons, B., Piercy, J., Noel, L., & Connolly, C. 1996. Nurse Educator Performance Standards. *Journal for Nurses in Staff Development* 2 (5), pp 247-251.
- Haddad, A. Cutting Corners on Patient education. 1999. *RN* 66 (7) July, pp 23-24, 26.
- Kim, HS. 1998. Structuring the Nursing Knowledge System: a Typology of Four Domains, Including Commentary by Hinshaw AS and Kim HS. *Scholarly Inquiry for Nursing Practice* 12(4), 367-88.
- Kim HS. 2000. *The Nature of Theoretical Thinking in Nursing*. New York, Springer Publishing Co.
- Kyngäs Helvi, 2003. Patient Education: Perspective of Adolescents with a Chronic Disease. *Journal of Clinical Nursing* 2003, Volume 12(5) 2003 p 744-751.
- Ohlen, J & Segesten, K. 1998. The Professional Identity of the Nurse: Concept Analysis and Development. *Journal of Advanced nursing* 28 (4), pp 720-727.
- Ojanlatva, A. 2001. Patient Education in Finland. *Patient Education and Counseling* 44 (1), pp 49-54.
- Rystedt, H & Lindström, B. 200. Introducing Simulation Technologies in Nurse Education: a Nursing Practice Perspective. *Nurse Education in Practice* 1 (3), pp 134-141.
- Tobin HM; Beeler JL. 1988. Roles and Relationships of Staff Development Educators: a Critical Component of Impact. *Journal of Nursing Staff Development* 4 (3), pp 91-6.
- Weiglein, Shirley. 2000. The Nature of Theoretical Thinking in Nursing. *Nursing and Health Care Perspectives* 21(6), pp 305.

Abstracts of ESGENA Poster Session on 2th November 2003

PROCESS GUARD AND VALIDATION OF CLEANING AND DISINFECTION PROCEDURE COUPLED TO A DRYING TIME.

Anja Roty-Post, Urmie Kemble

Section 4 – Hall Londres

Introduction.

Since 1996, there exists in the Netherlands, the Law of Quality Care Institutions.

As a result of this law the Dutch standards organisation have come up with guidelines for disinfection apparatus and a Dutch working party on infection prevention has been formed to produce guidelines for the cleaning and disinfection of fiberoptic equipment.

In our hospital the Infection Commission gives guidelines for:

- cleaning and disinfection procedures
- requirements when buying new apparatus
- validation of mechanical disinfection both technical and micro-biological
- validation of storage time in the drying cupboards both technical and micro-biological
- log-books for disinfection machines, drying cupboards and endoscopes

Aim.

Is the disinfection and drying procedure reliable to ensure the use of flexible endoscopes, free from micro-organisms, for at least than 72 hours after these procedures?

Methods.

In our unit, endoscopes are dried for two hours after cleaning and disinfection in the ETD2 machines.

Twice yearly the Hospital Hygiene Department carries out micro-biological validation of the endoscopes and the drying cupboards.

Up until now there have been no pathogenic micro-organisms cultivated, so the storage time allocated is 72 hours.

Conclusion.

Based on the methods and the results it is reliable to ensure the use of flexible endoscopes free from micro-organisms after the disinfection and drying procedure for at least 72 hours.

EFFICACY AND SAFETY OF GLUCOPROTAMIN, A NEW DISINFECTION AGENT IN GASTROINTESTINAL ENDOSCOPY

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Background:

Patient infection from contaminated gastrointestinal endoscopes is an important problem reported in endoscopy units. New disinfectants are now available in order to improve the efficacy of disinfection procedures.

Aim: To test the efficacy and the safety of glucoprotamin, a new disinfectant.

Materials & Methods: endoscopes were treated, before use, with glucoprotamin (Sekusept plus®) a new agent with a high antimicrobial activity. Then, after the procedure, the endoscopes were reprocessed according to the national and European guidelines. Every three months bacterial contamination was tested by sampling: a) the distal end of the endoscope by contact-plate, and the rising fluid of biopsy channel by washing with 10 mL saline solution, and b) the inside of the channels using a brush.

Results:

During six months we performed 9 controls: no contaminations (defined as a bacterial charge >20 CFU/mL) were found on the surface and/or in channels of gastroscopes, colonoscopes and duodenoscopes; a bacterial charge <3 CFU/ml was found on plates with samples taken from brushes after having been passed into biopsy channels. No *Pseudomonas spp* were isolated. In the same period, no significant contamination was found in the water reservoir of the washing machines. No side effects were noted on material or personnel. We compared these results to the controls obtained during the previous three months using glutaraldehyde (Cidex®): bacterial contaminations were tested in the same way previously described; no contaminations were found on the surface and/or in channels of gastroscopes, colonoscopes and duodenoscopes. The side effects observed were burning sensation in the eyes and upper airways and a disgusting smell.

Conclusions:

Our preliminary results suggest that Sekusept plus® appears to be a good alternative to glutaraldehyde with at least the same level of disinfection and it has no relevant side effects for the personnel in direct contact with the product.

GI-ENDOSCOPY UNIT DISINFECTION: EFFICACY & EFFICIENCY USING AUTOMATIC AND SEMIAUTOMATIC WASHING-MACHINES

Sección de Endoscopia(Dr JM Bordas). IMD. Hospital Clínic. Barcelona, Villarroel, 170 08036-Barcelona (SPAIN)

Jose Luis Gómez, Maria Isabel Gómez, María Jesús Rodríguez; Montse Medina

Disinfection is mandatory in GI endoscopy. Few studies were devoted to the efficacy and efficiency in GI assistencial practice

The aim of the study is 1- to have a knowledge of disinfection's time used by the different disinfection systems, 2- to know the total amount of endoscopes reprocessed using two Medivators, one Olympus ETD2+ washing machines and one Anios system with two disinfection sinks and 3- to assess the efficacy in obtaining high level disinfection

We studied prospectively the disinfection time used by each clean-disinfection procedure using the different washing machines: Anios, Medivators y Olympus EDT2+ and the amount of scopes reprocessed during six hours. The contact time for the selected disinfectant (Glutaraldehyde 0.260% phenol 0.916% phenate 0.156%) was 10 minute. The efficacy of disinfection was assessed by the culture of the channel fluent in MacConkey and Agar solid media (24 hours at 37°C)

Results

Timing (minute)							Hosp Clinic GI Endoscopy Unit			
Washing Machine	Mechanic cleaning	Scope Accomodación	Cycle	Final dry	Transport	Time per scope	Num of Scope / tray	Nº trays in the analysed unit	Nº of scopes during 6 hour session	Microbiologic control
Medivators	4	0.84	42	1,25	0,5	48.6	1	4	29	Neg
Olympus ETD2+	4	0.84	45	1,25	0,5	51.6	2	1	13	Neg
ANIOS (*)	4	0.84	22	1,25	0,5	28.6	1	1	12	Neg
							1	2	25	Neg
							2	1	25	Neg
							2	2	48	Neg

(* one or two tray & one or two scopes will can be simultaneously reprocessed in each tray.)

Conclusions

- 1- Anios semiautomatic system was more efficient for reprocessing scopes. However, constant activity of devoted specific personal is required;
- 2- Automatic washing-machines (Medivators by Olymus) do not need constant activity of specific personal during the cycle.
- 3- Adequate disinfection was obtained using both the analysed disinfectant time contact and the automatic and semiautomatic disinfectors used. Te total number of scopes that can be reprocessed during six hours in the Hospital Clinic GI Endoscopy Unit range from 54 to 90 mainly related to Anios flexibility.

REDUCING THE RISKS OF LATEX ANAPHYLAXIS IN THE ENDOSCOPY UNIT - RESULTS OF A LITERATURE REVIEW

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Background

Latex allergy is not a trival nuisance, symptoms can range from itchy rashes through to respiratory problems and anaphylaxis. Since1990's there has been an increasing awareness that such allergies pose significant hazard for health care professionals and patients alike. Within the authors own health care setting revealed a lack of knowledge on issues surrounding latex, prompting a Literaturen Review on the subject.

Method

A literature review was undertaken using BNI, Medline, Cinahl and Cochrane databases confining the search to the years 1995 - 2002. Using latex and anaphylaxis as key words. Although most articles referred to the preoperative setting it was felt that their findings were equally transferable to the endoscopy setting.

Results

Literature review revealed increasing sensitisation to latex in exposed populations with between 1-6.5% of the general population at risks and women making 75-85% of the latex allergic population. This increase in latex sensitive cases may be a result of increasing universal precautions (ie wearing of gloves) in the wake of the spread of HIV in the 1980's. Inadequate history taking was noted by many (Porri Et Al 97...).

As the main culprit concentrating primarily on drug and food related allergies with increased education of health care professionals needed to identify and manage risks.

Outcome

An education package was devised within the authors endoscopy unit. This has resulted in the early identification of staff and patients at risks of latex sensitivity, increased use of latex free equipment within the Department and improved pre-assessment to patients to identify and manage risk.

This has resulted in the early identification of staff and patients at risks of latex sensitivity, increase ...

(printed as received)

SHORT-TERM NURSING AND PATIENT CARE OF OUT-PATIENTS IN ELECTIVE GASTROSCOPY, AND SURVEY OF PATIENT SATISFACTION.

By the Nurses Gitte Kjeldsen and Ruth Espersen, L.Operation Ward Aarhus University Hospital, Aarhus, Denmark.

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Background.

Nurses have very little time to practice actual nursing, as most examinations only last 5-20 minutes.

Before examination all patients receive a letter from the hospital with information, among other things telling about the possibility of receiving sedatives before the examination.

We have employed Virginia Henderson's theories.

Aim.

To examine if the way of practising patient care results in a high patient satisfaction, and if sedation influences patient satisfaction.

Method.

After examination a total of 100 out-patients were asked to fill out a questionnaire anonymously.

We used the following questions:

- 1) What is your opinion about information? Before, under and after the examination?
- 2) What is your opinion about care? Before, under and after examination?
- 3) Did you receive sedatives? If yes, do you remember the examination?

Results.

Out of the 100 patients 49% did not choose to get sedatives. Of these 83,7%, 89,8% and 81,6% respectively found that information before, under and after the examination was very good, and 83,7%, 100% and 90,8% respectively found that care before, under and after the examination was very good.

The related figures for patients, choosing sedatives are 86,3%, 86,3% and 82,4% for information and 82,4%, 90,2% and 90,2% for care respectively.

Out of the patients choosing sedatives 78,4% remember the examination, 21,6% do not remember the examination. If the results for the patients, who do not remember the examination, are neglected, the figures are 90,0%, 87,5% and 87,5% for information and 85,0%, 95,0% and 90,0% for care respectively.

Conclusions.

There is no significant difference in patient satisfaction between the group of patients, not choosing sedatives compared to the group, choosing sedatives.

In our way of practising care, sedation does not seem to influence patient satisfaction.

MONITORING DOCUMENTATION FOR PATIENTS UNDERGOING ANTI-TNF α (INFLIXIMAB) INFUSION TREATMENT

Christiane S. Neumann, City Hospital, Birmingham, B17 9RT, UK

e-mail: Fehler! Textmarke nicht definiert.

INTRODUCTION:

Out-patient *Anti-TNF α* treatment of IBD patients with Crohn's disease has become common. However, individual nurses and junior doctors may only be involved infrequently with administering the infusion and

monitoring patients during that period. As *Anti-TNF α* infusion has the potential for serious side effects and reactions staff need to be aware of necessary checks and observations to minimise these.

AIM:

To devise an easy, yet comprehensive multidisciplinary monitoring sheet

RESULT

The recommendation of the company manufacturing *Anti-TNF α* were reviewed. Important elements relevant to nursing and to the administering medical staff were extracted. A monitoring sheet incorporating these elements was devised and tested. Minor alterations were made after piloting the monitoring sheet.

Infliximab Observation Chart																																																																																																																							
Pre-INFUSION		DATE:																																																																																																																					
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SUMMARY & CONCLUSION

The monitoring sheet has been shown to be useful as a comprehensive data collection and observation form, especially when staff are relatively inexperienced in the administration of *Anti-TNF α*

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Gastro-esophageal reflux disease (GERD) affects nearly 4% of the population. The treatment of this pathology consists of long-term medication with drugs such as proton pump inhibitors (PPI) or antireflux surgery either in laparotomy or laparoscopy.

In 1994 Swain perfected the first flexible endoscopic suturing device and in December 2000 the endoscopic suture device (EndoCinch) in endoluminal gastric plication (ELGP), produced by Bard, was approved for use by the Health Ministry of Italy.

From January 2001 to February 2003 22 patients underwent antireflux endoluminal gastric plication in our department. All were suffering from important symptoms of GERD, and pH manometry demonstrated pathological findings and/or esophagus-gastro-duodenoscopy (EGDS) revealed the presence of (1st or 2nd degree) esophagitis.

The technique consists in placing plications at or just below the squamocolumnar junction arranged either lengthwise or circumferentially. The patient is placed under deep sedation or general anesthesia. Medical and nursing personnel were trained on mannequins with pig stomachs (Erlangen). The role of the nurse during ELGP is of extreme importance both before and during the intervention. In the pre-operative stage particular attention is given to correctly mounting the suction capsule onto the endoscope, the precise insertion of the needle loaded with the suture, and connecting the handle to the biopsy port of the endoscope which can later trigger the needle.

During surgery the nurse is responsible for loading the sutures into the needle of the suction capsule, keeping tension on the threads during the arrangement of the folds, and for connecting the Endocinch device to the suction capsule.

All patients who underwent ELGP had a complete resolution of their symptoms or a drastic reduction in the amounts of PPI necessary with a substantial increase in their quality of life. The advantages to this procedure are the fact that it is easily repeated, reversible and can be carried out as an outpatient procedure under sedation. Long-term results of the procedure compared to laparotomic/laparoscopic surgery must still be analyzed; this evaluation should also consider that this procedure is performed in an ambulatory/day surgery setting and that it can be easily repeated.

Efficacy, Safety and Tolerability of Two Oral Cleansing Solutions for Colonoscopy Preparation

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Background and study aim

New endoscopic techniques such as magnifying colonoscopy require optimal bowel preparation, but large volume cleansing solutions are poorly accepted by many patients. Previous studies on the efficacy and safety of bowel preparation solutions for colonoscopy have yielded conflicting results.

This study is a randomised single-blinded trial that compares the safety, tolerability and efficacy of two popular bowel- cleansing solutions for colonoscopy: Oral Sodium Phosphate and Klean-Prep. The aim was to develop a guideline for the preparatory bowel cleaning for colonoscopy and sigmoidoscopy in our department.

Patients and Methods

A total of 100 patients scheduled for elective colonoscopy, were randomised to undergo either Klean-prep® or phosphoral® pre-colonoscopy bowel cleansing. Consecutive patients 18 years or older that gave informed consent were eligible for the study. Patients with signs of obstruction, heart failure class III and IV, colostoma, and renal insufficiency were excluded. Blood was obtained at inclusion and during the procedure and the following tests were performed: hematocrit, electrolytes, urea, creatinine, serum osmolality, calcium and phosphate. Patient satisfactory and symptoms were measured using a questionnaire. The efficacy of bowel preparation was scored by the endoscopist who was blinded with regard to the type of preparation used, using a predefined rating scale.

Result

50 patients received Phosphoral and 47 Klean-prep. Three patients discontinued the study either because of withdrawal of consent or because the colonoscopy was postponed. All patients reported to have completed the preparation as instructed.

Patient satisfaction: Assessment of symptoms of nausea, vomiting, abdominal pain and dizziness occurring during the evacuation of the colon did not reveal any statistically significant differences between the two groups.

Effectiveness: The Colonoscopist rating of the degree of colonic cleansing demonstrated an overall superior preparation of the colon with over 90% of both bowel-cleansing solutions, ranked as good or excellent.

Conclusion

A guideline is developed in our department for the pre-preparation of sigmoid and colonoscopy. As far as it concerns the cost of a nurse given an enema to the patients for sigmoidoscopy, it is a benefit that the patient can use phosphoral instead of klean-prep which is a large volume of drinking.

INTEGRAL ENDOSCOPY TRAINING FOR G.E. PHYSICIANS, FELLOWS AND NURSES

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Objective

Training on the job as a team in order to share experiences between separate disciplines to improve skills and benefit from the joint practice.

Methods.

Monthly we organise sessions for a maximum of 20 physicians and nurses, divided in four sub-groups (One physician, two fellows and two nurses). One course takes one day divided in four modules of one and a half hours.

Module 1: ERCP skills and knowledge of equipment.

Module 2: EASIE model (pigs stomach specimen with liver) to practice ERCP-skills.

Module 3: EASIE model (pigs stomach specimen with bleeding focusses) to practice haemostase techniques

Module 4: Symbionix training (interactive computerised simulator for endoscopic procedures).

Knowledge of endoscopic procedures, hands-on training of equipment involved

Conclusions.

Questionair results (N=46): 92% (N=40) of the last two groups showed improvement in skills.

A Program of Education for Patients with Inflammatory Bowel Disease and their Family members.

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Introduction: Inflammatory Bowel Diseases (IBD) are a spectrum of disorders that are lifelong, often complicated and young people are often affected. Many patients are being operated on during the course of their disease. The need for reliable information to the patients and their relatives is substantial. Newspapers and other media very often provide inaccurate and contradictory information. This brings confusion and uncertainty to our patients.

Aim: Our aim with this program was to provide our patients and their relatives with relevant information and knowledge about their disease. At the start of the project we hoped that this information would help the patients cope with their disease. One aim was also to give the patients knowledge, helping them in their discussions with their own physician. We also hoped that the patients would need less time and less effort at regular out patient visits.

Method: Our method was to give a group of patients and their family members a series of lectures. Every course comprised of four two hour's lectures with one week apart. Lectures were given by the entire team responsible for the care of IBD-patients at our unit including a medical gastroenterologist, a colorectal surgeon, a stoma therapist, a social counsellor, a dietician and a dental hygienist. The curriculum of the course covered all aspects of disease including ethiopathogenesis, symptoms, medical and surgical treatment, psychosocial aspects, stomatherapy, future aspects including research.

Results: After the course the patients and their relatives were given a structured evaluation sheet. Their response has helped us develop and change the program. The overwhelming majority of the patients and their family members have been very positive about the education. It has been hard to prove that the education program has

eased the burden at the policlinic. The long-term benefit for the patients in terms of decreased requirement for medical care is difficult to predict and remains to be shown.

Conclusion: There is a great need for reliable information and knowledge for the patients with IBD. We have provided an educational program in an effort to increase the knowledge of the patients. So far we believe that our patients have found this information useful but long term benefit remains to be shown. In the poster we provide details about the educational program and our experience in doing this work.

VIDEO CAPSULE, A SMALL REVOLUTION

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Introduction

The video capsule has been presented for the first time at the annual meeting of AGA in May 2000. Conceived by Given Imaging, the video capsule is a new mode of investigation of the small intestine which allows the search for the cause of occult bleeding.

The video capsule (11x26mm) includes: a radio transmission, a light source, an electronic chip (57000 images during the whole transit time) which allows to transmit the data to a portable recorder. It is evacuated in the stools .

Aim of the study

The aim of this study is to compare the diagnostic value of video capsule with push enteroscopy and the consequences on patient's work-up.

Method

Elaboration of a procedure to compare these investigations.

Patient

The video capsule was introduced in May 2003 in our division of gastro-entrolgy.

Recently, a study has been realized in 3 french centers (Nancy, Lyon , Paris) as follows:

Patients were submitted to both video capsule and push enteroscopy within 72 hours, while physicians were blinded of the procedures.50 patients have been examined.A double lecture was done to evaluate the reproductibility of the exam.

The discomfort associated with push enteroscopy (hospitalisation , complete anaesthesia) is avoided using the capsule.

Results

Out of 50 patients, 71% presented lesions in the small intestine. The exam by video capsule yielded a better diagnostic value than push enteroscopy , 85% of the cases.

Conclusion

This technology provides new perspectives about exploration of the colon and the stomach. It's major draw-back is the cost and the risk of capsule impaction in on unsuspected stenosis. This may necessits surgery .

PRACTICE OF THE WIRELESS CAPSULE ENDOSCOPY: ROLE OF THE NURSE

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Introduction

Wireless video endoscopy or video capsule endoscopy is a novel non-invasive technology designed primarily to provide diagnostic imaging of the small intestine, an anatomic site that has proved particularly difficult to visualize. Limited views of the oesophagus, stomach and caecum may also be obtained.

Images acquired are of excellent resolution and have a magnification greater than that of conventional endoscopes.

Indications

The indications for video capsule have yet to be defined, but the experience with the capsule suggests that the main indications for its use will be:

The detection of the origin of obscure gastrointestinal bleeding after conventional work-up has been completed and has not revealed a source.

Assessment of the extent of Crohn's disease in the small bowel.

Helping to define the extent of malabsorptive conditions, such as celiac disease and detection of small bowel tumours, diagnosis of small bowel motility disorders and surveillance of polyposis syndromes of small intestine.

Abdominal pain with reasonable suspicion of organic disease in small intestine.

Visualization of surgical anastomoses.

Limitations and Contraindications

The main disadvantage of video capsule is that it does not permit tissue sampling or therapeutic intervention.

The procedure may be contraindicated in patients with the following conditions:

Patients with suspected obstruction or stenosis.

An oesophageal stricture or swallowing disorder that could prevent passage of the capsule.

Patients with heart pacemakers and other electromechanical implants.

Procedure

Patients are informed about the procedure before arrival at the hospital. They are asked to fast overnight. The nurse takes the parameters of the patient: weight, height and waist.

After starting up the Given® diagnostic system software, the nurse has to enter all these data. An eight lead sensor device is fixed to the abdomen. A template defines the correct position. The device is connected to a solid-state recorder and power pack worn on a belt.

The 11 x 26 mm video capsule is swallowed with water. Clear fluids and food can be taken two and four hours respectively after ingestion of the capsule.

The belt is removed after seven to eight hours and the recorded images are downloaded to the Given workstation. Review of the video, selection of images can take a few hours.

Conclusions

Capsule endoscopy has several possible advantages compared to other means of visualizing the small bowel. It is non-invasive and permits examination of the majority of the small bowel mucosa, which is not possible with push enteroscopy.

Apart from the interpretation of the images, the nurse plays an invaluable role in performing the whole procedure.

ENDOSCOPIC PROCEDURES FOR THE TREATMENT OF GASTRO-ESOPHAGEAL REFLUX DISEASE.

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Introduction:

Gastro-esophageal reflux (GERD) is one of the most frequent problems in gastro-enterology. For the treatment of uncomplicated GERD patients have the choice between classic surgery and medical therapy. Recently, new endoscopic techniques were developed for the treatment of GERD. The first treatment was the plication procedure, designed by Swain. This technique uses a sewing machine to place sutures below the gastro-esophageal (GE) junction. Later techniques like the stretta procedure consists of creating a fibrotic ring at the GE junction with radio frequency heat. Other techniques try to create a mechanical barrier by injecting substances at the GE junction.

The objective of this paper is to clarify the role of the nurses in the plication technique.

The plication technique

The Bard EndoCinch method was the first to be approved for the treatment of GERD. In this method a capsule is assembled on the top of the endoscope. This capsule is being loaded with a needle, a pusher and thread. The endoscope is advanced to the GE junction under vision. Suction is applied which pulls a fold of tissue into the jaws of the sewing machine. The needle is then advanced through the tissue. The pusher pushes the thread through the needle. After withdrawal of the needle, suction is stopped allowing the tissue to leave the capsule. The thread is captured in the distal part of the sewing machine that is removed from the stomach. This procedure is repeated one time followed by a knot, placed with a suture anchor.

The role of the nurses

Positioning of the patient and the endoscopic equipment: the patient lies on the left side like for classic upper endoscopy. While positioning the endoscopic screen it is important to keep in mind that the gastro-enterologist must keep his endoscope straight during the procedure, which diminishes his freedom of movement. The screen must be placed at the head of the patient, preferably at the opposite side of the gastro-enterologist.

Assembling the sewing machine: the capsule is placed at the tip of the endoscope and the needle and pusher are advanced through the biopsy channel until they exit into the sewing machine. The exact positioning of pusher and needle is crucial for the success of the procedure. A powerful suction must be applied at an extra suction tube, present on the capsule of the sewing machine. The thread must be loaded before starting the procedure.

The procedure: suction must be stopped at the right moment to allow the tissue to leave the capsule before retrieving the endoscope so to prevent mucosal tears. Once suturing has started, the thread(s) must be kept straight to prevent knots. At the end of the suturing the knots must be placed using the suture anchor.

Conclusions:

The assembling of the sewing machine and the suturing are quite complex and requires trained nurses. Incorrect installation of the device and mistakes during the procedure can lead to complications such as mucosal tears, bleeding and loss of the capsule in the patient during the procedure. If a good coordination exists between the nurses and the endoscopist the procedure can be performed smoothly within 20 minutes

FLEXIBLE ENDOSCOPIC TREATMENT OF ZENKER'S DIVERTICULUM

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Introduction: Zenker's diverticulum (ZD) was first described by Ludlow in 1767 and by Zenker and von Ziemssen in 1877. Since then this kind of diverticulum has been called Zenker's diverticulum.

Pathogenesis: Zenker's diverticulum emerge from a defect in the muscular wall of the hypopharynx which is formed by the oblique fibres of the inferior pharyngeal constrictor muscle and the cricopharyngeal sphincter. Evagination of the sphincter is thought to result from chronic increased pressure on the weakened area, which may be due to high intra bolus pressures during swallowing and/or resistance to swallowing, due to abnormalities of the U.E.S. Through this defect the mucosal lining bulge outwards like a pouch. A bridge arises between the oesophagus and the diverticulum. The pouch enlarges gradually and descends behind the oesophagus downwards.

Clinical manifestations: Zenker's diverticulum is usually discovered in older adults.

Most patients present after the age of 50, having had symptoms ranging from weeks to years. Transient dysphagia may be noted early in the course. The opening of a large ZD is often aligned with the axis of the pharynx such that food is preferentially diverted into the diverticulum. When the pharyngeal sac becomes large enough to retain contents such as mucus, pills, sputum, and food, the patient may complain of pulmonary aspiration, gurgling in the throat, appearance of a mass in the neck, or regurgitation of food into the mouth. The ZD may become so large that its retained contents may push anteriorly and completely obstruct the oesophagus.

Treatment: The mainstay of treatment of symptomatic ZD has been surgery. However, in Europe, no surgical minimally invasive methods have been increasingly used. The rigid endoscopic approach used by the E.N.T. physician, was a major advance in the 1950s. However, surgery is not possible in many symptomatic elderly patients who are poor surgical candidates. The first reports using the flexible endoscope for treatment of ZD were not published until 1995. The same principle used in rigid endoscopic approach can be applied during flexible endoscopy. The procedure is performed under conscious sedation, in contrast to the surgical procedures in which general anaesthesia is necessary. Since in 1993 the flexible endoscopic technique was introduced in our hospital as a new management modality for this disorder, over 300 patients have been treated in this way. Virtually all patients have shown marked improvement in symptoms after one or two endoscopic treatments.

Case presentation: Through a case, the therapeutic procedure and especially the nursing care of the patient will be discussed in stepwise manner.

Conclusion: Optimal management of patients with ZD is evolving. The main advantage of the flexible endoscopic approach is that it can be performed without the need for general anaesthesia, and therefore also in patients whose general health is very poor. The technique can easily be performed in an interventional endoscopy unit. Flexible endoscopic treatment of ZD seems to be an effective and relatively safe method.

ENDOSCOPIC EVALUATION OF FOREIGN BODIES IN THE UPPER DIGESTIVE TRACT

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PURPOSE:

The evaluation of the foreign bodies in the upper digestive tract and endoscopic treatment.

MATERIAL AND METHOD:

27 patients with voluntary or hazardous ingestion of foreign bodies were evaluated endoscopically in the 2nd Medical Clinic from 1st of January 2001 to 1st of August 2002.

RESULTS AND DISCUSSIONS:

Out of the 27 patients, 20 (74%) were male and 7 (26%) were female (average age 54.7 years); 12 (44.4%) were living in the town and 15 (65.6%) in rural areas.

8 foreign bodies got in the stomach (5 phytobezoars, 2 metallic wires and 1 spoon swallowed down) and 19 cases at the level of the esophagus (1 dental prosthesis, 3 cases of fish bones, 1 case of bone fragment, 2 cases of fruit core, 1 case of olive and 11 cases of cartilaginous meat fragment).

In the case of the esophagus foreign bodies endoscopic extraction was proposed in all the cases: in 14 cases (78.9%) the endoscopic extraction of the foreign bodies was succeeded (with the snear or with the clawed probe), in four cases the foreign body was pushed into the stomach, and 1 case of alimentary residue was settled by fragmenting into smaller residues of which some were extracted and the last pushed into the stomach. In 9 cases pre-existing lesions of esophagus stenosis were present (8 benign-peptic or postcaustic and 1 malignant) and in 3 cases esophagus motor troubles (2 cases of esophagus diffuse Spasm and 1 case of Achalasis).

In the case of gastric foreign bodies - 3 held with voluntary ingestion of metallic objects, 1 case (wire) was settled by the endoscopic extraction with overtubes and the others due to the fact that they were caught into the gastric mucous and transpylorically into the duodenal mucous were settled by surgical intervention.

CONCLUSIONS:

- Esophagus foreign bodies appear on pre-existing lesions of stenosis or esophageal motor trouble in almost 70% (68.4%) of cases.
 - The endoscopic treatment of esophageal foreign bodies was successful in 100% of cases without accidents
 - In the case of metallic gastric foreign bodies caught in the gastric mucous and transpylorically in the duodenal mucous, the endoscopic therapy is very difficult.
 - The role of the endoscopic nurse during the project
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