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Abstracts of the 9th ESGENA Conference

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Best Free Paper 2005
Category: Oral Presentation
Presented: 16 October 2005

Patient satisfaction survey concering the education at the "IPD PATIENT SCHOOL"

Introduction
The outpatient clinic, Department of Medicine V, Aarhus University Hospital has as one of the first departments in Denmark developed a school for patients with Inflammatory Bowel Disease (IBD): ulcerative colitis (U.C.) and Crohn's Disease (C.D.) among adults diagnosed within the last three years. The "IBD-school" was established in spring 2003. During the previous 9 months, nurses with experience with IBD patients planned the teaching programme based on a thorough review of the relevant literature. The nurses furthermore practiced teaching with feed back from the colleagues and a gastroenterologist. The purpose of the school is to provide the patients knowledge about the disease and its treatment, through interdisciplinary and structured education, and to make them capable of coping with their disease and take responsibility for self-medication in order to reduce the limitations of a chronic disease.

Aims
To clarify how the patients felt to profit from the education and how education influenced the patient's knowledge about the disease and whether they improved their capability of coping with the disease. Furthermore, evaluation of teaching methods was included.

Methods
A standard questionnaire with 10 questions has been developed from pilot studies and handed out to the patients. The questionnaire has space for individual comments.

Results
The study was conducted from spring 2003 to autumn 2004. A total of eight classes participated, with 73 patients of who 53 answered (60% response rate). The majority of both patients with U.C. (83%) and patients with C.D. (91%) referred that the time spent on the education concerning knowledge about the disease and the medical treatment was sufficient. As regards coping with the disease, 63% of U.C. patients and 60% of C.D patients would not contact the hospital if they had a minor flare up. If they felt insecure, 86% of U.C. patients and 100% of C.D. patients would contact the hospital. Concerning the teaching metods only half of the patients in both groups wanted discussion or group work – in fact if that was the only possibility they would not participate – whereas the other half required it in some form. The individual comments expressed satisfaction and confidence with the school, especially to manage the disease, mainly concerning symptoms and treatment. The first priority for getting information was individual counseling, followed by the "IBD-school", written

information and the internet.

Discussion
The result of the questionnaire shows that the patients were satisfied with the subjects taught and with the teaching methods. The information was given mainly by nurses with practical and teoretical background concerning IBD treatment and control.The future education will include adjustments to fullfill the patients' needs for information in other special clinical situations, such as the reproduction period.

Keywords
IBD-school, patient school, health education of patients.

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Best Free Paper 2005

Category: Poster Presentation
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Follow-up problems solving placement of percutane endoscopic gastrostomy feeding tube (PEG)

Background for the project
Every week the Endoscopic Unit is approached by nursing staff from the primary sector about problems concerning maintanence and care of their patients with PEG feeding tubes.
As endoscopy nurses our primary area of responsibility is related to the placement of PEG feeding tubes and not the caretaking and maintanence afterwards. Therefore we found it unsatisfactory that we were unable to give qualifed solutions to those who have sought our help.
The initial experience from the project have shown that many of the caretaking problems that we met, could have be prevented by educating the primary nursing staff. We found it very ungratifying that after relative simple and uncomplicated placement of PEG feeding tubes turned into problems for the patients which otherwise could easily have been prevented.
Objective:
The objective of the study was to find out the how often we were approached concerning problems with PEG feeding tubes, who the patients contact when they have problems and what types of problems that occur most frequently.

Method
In march of 2003 a questionnaire was sent out to many different hospital units including the Emergency Room, concerning how often they were approached and with what type of problems that were approached with. The period we were concerned with was from 14 days after placement of the PEG feeding tube and represented patient from hospital units as well as patients from the primary sector or patients in their own home.
The questionnaire addressed:
- Where did the approaches come from?
- Who was approached?
- Which types of problems was it concerning?

Results
The studies conclusions were:
- Most approaches came from nursing homes.
- The endoskopic unit was approached most frequently.
- Most of the problems were concerning replacement of the tubes, clotted tubes, defect og missing connections.
- Less that a third of the problems required the knowledge of experts (for example skin problems, stomas that were too narrow or secretion beside the tube).

The study has resulted in the following:
- 3 nurses are now specialized in PEG after care.
- Home visits/nursinghome visits when approached about problems with PEG feeding tubes.
- Educating nursing staff in the primary sector in PEG caretaking.

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Free Paper Session: Service Development

Nutrition Nurse led Gastro-jenunostomy Feeding Service

Objective
To effectively provide and manage enteral feeding for patients who are unable to tolerate gastric feeding.
- To review the need for gastro-jejunostomy feeding service;
- To assess the types of gastro-jejunostomy tubes used;
- To demonstrate the problems encountered and the benefits of each individual tube.

Methology
During the last twelve months, six patients have required a gastro-jejunostomy feeding tube. This highlighted the need for such a service to be made available. Initially, we had to establish the various types of gastro-jejunal tubes which were available on the market. The provision of this service had previously been hampered due to complications arising from products being used. A literature review was undertaken to identify the current products available. In my role as Nutrition Nurse Specialist, I identified a

small group of patients with a variety of conditions who would potentially benefit from this service. Various companies were contacted to discuss the products available, together with their reliability and costing. The following criteria were used to evaluate each product:

- method of placement;
- frequency of manufacturers recommendations on the replacement of the tube;
- cost implications;
- potential complications/risks;
- clinical viability;
- training and support offered by the manufacturers.

Findings

To date a total of 4 different types of tubes have been placed, one radiological and three endoscopic. It is our aim to highlight the problems encountered and the benefits of using each individual tube. Problems encountered included: migration of the jejunal tube extension into the small intestine; displacement requiring early replacement; high risk of occlusion; limited knowledge of after care; training issues; lack of written guidelines for the care of patients with a gastro-jejunostomy.

Main benefits being: easier techniques, for the method and frequency of replacement; minimal disturbance to patient's nutrition; reduction in the need for clinical intervention.

Conclusion

Jejunal feeding is not without complications and therefore the assessment and appropriate selection of patients for this procedure is very important. The development and provision of this facility enables better management and nutritional support for patients who may otherwise require higher risk methods of feeding, e.g. parenteral or continue to suffer the consequences of continued gastric feeding. This review has helped to improve the management and facility of enteral feeding for patients who are unable to tolerate gastric feeding.

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Quality – improvement model increases corporation between home care- and hospital nurses regarding patients at nutritional risk

Rationale

By discharge from hospital many patients enter home-care nursing at nutritional risk. The aim of this study was to develop a model to improve corporation, hereby education, between sectors.

Material and Methods

A bi-sectorial, quality improvement project was established, including medical and surgical department at Aalborg University Hospital, and a board of doctors and head nurses, leading home care nurse, dieticians, general practitioners and a member of the elderly board, Aalborg County.

An evaluation by questionnaire for home-care nurses was done before and after the project period. At the hospital an audit regarding nurses' records at discharge was made.

Included in the nursing model:

1. Nutritional status and plan of action for patients discharged to home-care nursing.
2. Tools to identify under nutrition, registration of food-intake and patient information material, were made for primary care.
3. A 3 hour education programme was offered all home-care nurses.

Results

Out of 284 home-care nurses, 145 (%) responded to the first questionnaire, and 100 (%) responded after the project period. Only 68 (%) responded to both.

1. Nurse's record audit showed that all patients at nutritional risk discharged to home-care nursing were given a nutritional status and plan of action.
2. The information material was read by 93% of the home care nurses and all found it useful. The ability to provide clients with adequate information material improved from 11% to 49%.
3. Knowledge towards under nutrition increased from 43 to 66%, and more found that this knowledge was relevant (86 vs. 57%). Discussion among colleagues about nutritional aspects increased from 43 to 60%. About one-third were unable to give nutritional advise to clients, however, this problem further diminished (8%).

Conclusion

A successful model was made, especially regarding focus, education and information material.

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Endoscopy Unit Design: an Essential Keystone to Providing an Efficient Caring Service

Aim

To provide the optimal environment for patient focused care combined with a state of the art endoscopy teaching facility.

Learning Outcomes

1) Importance of input by key staff in unit design.
2) Appreciation of the environment of endoscopy units in relation to patient care.

Introduction

It is well known that patient's who are to undergo endoscopy are anxious. This can result from the fear of the unknown, the procedure and the outcome. We can overcome some of these anxieties by ensuring patients are well informed before attending for their endoscopy. However, the anxieties that patients feel are often compounded on their arrival to the endoscopy unit by the environment and layout of the unit. If we address the environment not only should this improve patient care but also enhance the working environment for staff.

Methods

We personally designed a unit, based firstly on the patient and their flow through the unit. Staff were our second priority and nurse, technician and doctor training third. It was essential that we were able to provide a one-way flow for both outpatients and inpatients through the unit with a separate access for both. Emphasis was placed on space, light and colour. Our aim was to treat those booked for endoscopy as a person rather than a patient for as long as possible through their journey. The centre point in the waiting area is natural light with floor to ceiling windows more akin to a hotel reception than a hospital. Privacy and dignity were preserved by designing private admission bays away from the clinical area and by implementing a named nursing system, which immediately gave the patient an identified carer. The colour scheme was chosen for its calming effects and is replicated throughout the unit. Recovery areas are bright, airy, non-crowded and supplemented by a discharge lounge, which together create an atmosphere of calm, despite the busiest of lists. The emphasis on teaching included audio-visual links to all procedure and cleaning rooms, with the ability to link to centres worldwide for distance learning. With a forty seat seminar/class room, we are able to provide a full range of basic skills course for all healthcare workers.

Results

Patient's have felt the environment of the new endoscopy unit to be relaxed and their anxiety levels have significantly decreased.
By designing comfortable staff areas, such as the large rest area and cleaning areas, our staff feel valued and recruitment and retention rates are high.
Over the last six months sixteen basic skills courses for endoscopists and endoscopy assistants have been carried out.

Conclusion

Endoscopy units are often designed by hospital estates departments and architects who have no knowledge of the priorities in patient care and requirements for a harmonious environment for staff or teaching needs. If endoscopy is to be the foremost modality for GI investigation, endoscopy professionals need to be integral to the design process.

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Our Experience to improve the Endoscopy Service

Objective

To reduce inpatient and outpatient waiting time for Endoscopic Procedures and enhance the patient experience by efficient management and redesign of the service.

Methodology

The Project Team first looked at reducing the waiting list time of referrals; all the waiting lists were validated, with the removal of any inappropriate / unwanted procedures.
The next stage was to redesign and improve the service, to reduce the 'did not attend' patients (DNA) and cancellation of procedures. The introduction, of "telephone pre-assessment", to improve informed consent and preparation of patients.
The introduction of a patient focused booking system "partial booking" has given the patient the element of choice for their preferred date for the procedure. This replaced telephone pre-assessment. Within the theatre template the inpatient slots are protected to ensure no blocking of beds. This system provides ongoing validation of the waiting lists.
A review of the demand management, all outpatient referrals are vetted by Consultants and categorised as urgent or routine to provide a better quality of patient care. All in-patient colonoscopy referrals are vetted by Senior Registrars, to eliminate any unnecessary tests for patients and reducing bed blocking.

Results

The change in service redesign – a new regime of 14 sessions per week was implemented with three nurses on an upper GI list rather than two. This improved patient scheduling by allowing a faster turn around of patients. This resulted in an increase in activity per list .All lists are consultant led, with a greater flexibility of doctors to cover the lists, with less cancellations. At the outset of the project, outpatient referrals were waiting 18 months for gastroscopy and 22 months for colonoscopy. Both procedures are 6.5 months and falling.

Summary

A combination of all the above factors has led to reduced inpatient and outpatient waiting times.

We are now providing a patient focused service with partial booking, whereby patients are better prepared and informed. The next stage will be to evaluate partial booking through a patient satisfaction audit. It is recognised that patient satisfaction audits have limited value and therefore we would seek to support these by establishing regular patient user group feedback, along with individual patient narratives. The information gathered would enhance the patient experience.

The work undertaken has contributed to a measurable reduction in waiting lists and DNA'S through effective management and redesign of the Endoscopy Service.

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Is there a need for nurse endoscopists in the Irish health service? A study on evaluation of nurse provided endoscopy

Background

In the United States (US) nurses have been performing cancer – screening flexible sigmoidoscopy for the past 35 years (SGNA 2004). Nurse Endoscopists have been practising in the United Kingdom (UK) since the 1990's (BSG 1994). The objective of this study is to evaluate the provision of current Endoscopy services in Ireland to determine if there is a need for Nurse Endoscopists in the Health Service.

Method

Local conditions dictate the volume of procedures being provided and the waiting times in Endoscopy Units. For this study, the researcher developed a questionnaire which was sent to all Endoscopy Units in the Irish Health Service, to quantify data on the volumes and waiting lists for Endoscopy Services. Data on identifying who is currently performing the Endoscopy procedure and their opinions on the need for Nurse Endoscopists were included.

Main findings and conclusions

Twenty eight responses were received from the forty five units surveyed. Main findings indicate average waiting lists for gastroscopy to range from 1 - 3months, for colonoscopy 3 months or greater, for flexible sigmoidoscopy 1 – 2 weeks. The questionnaire established there are currently no Nurse Endoscopists in the respondents units.The study concluded that Nurse Endoscopy is not currently practised in the Irish Health Service. Attitudes perceived that the service could benefit from Nurse Endoscopists and that most Medical Endoscopists are prepared to be involved in training and providing clinical support for Nurse Endoscopists. Endoscopy Nurses indicated their willingness and interest in training as Nurse Endoscopists.

2 Things The Delegates could learn from this presentation

An analysis of the current Endoscopy Service in Ireland and its problems.

The willingness or otherwise of Nurses in Ireland to train as Nurse Endoscopists.

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Training to perform flexible sigmoidoscopy: A personal experience from the Netherlands

Introduction

There is an increasing interest in the Netherlands regarding the introduction and training of nurse endoscopists. After adequate training, nurses in the USA and Great Britain have been successfully performing sigmoidoscopy for a number of years (1, 2). Although an official training course for nurse endoscopists is currently being developed, gastroenterologists at the University Medical Center in Utrecht have successfully trained a nurse to perform sigmoidoscopy. The aim of this paper is to describe the training program that the nurse received and to share her views on the training given.

Method

The theoretical training was given by a Consultant Gastroenterologist. Anatomy, physiology, pathology and the interpretation of endoscopic images were taught. Practical training included the technique of performing endoscopy, handling the endoscope, rectal examination and the documentation of the results. Attention was given to the possible complications during and after sigmoidoscopy. The nurse received further education by following a course in 'advanced nursing practice'. Performing a physical examination and communication skills were part of the curriculum. The first 50 examinations were performed together with the gastroenterologist. The following 100 examinations were carried out under (in)direct supervision.

Results

Since commencing training the nurse endoscopist has completed 500 examinations. The number of patients consenting to a nurse carrying out the sigmoidoscopy was 100%. There have been no complications. Fifty percent of the last 100 examinations have been completed and documented without needing to consult the supervising gastroenterologist. The most common indications for sigmoidoscopy performed by the nurse endoscopist were rectal bleeding (56%), change in bowel habit (14%) and diarrhea (12%).

Conclusion

The training was successful. The nurse experienced the individual and flexible approach from the Consultant Gastroenterologist as an advantage. The absence of written material to support the training and the solitary position of the nurse were the only disadvantages of the training program. The total training period was long (2 years). The quality of the examinations performed by the nurse are to be compared to those carried out by a gastroenterologist in a randomized trial.

1) It is feasible to train nurses to perform sigmoidoscopy to a satisfactory standard in the Netherlands although an official training course is preferable.

2) Dutch patients have no objection to being examined by a nurse endoscopist.

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Group based intervention in IBD-patients – effect on quality of life assessment?

Objective

Chronic inflammatory bowel diseases (IBD) such as ulcerative colitis (UC) and Crohn's disease (CD) may influence quality of life (QoL) and have great impact on physical, emotional and social life. In our daily work as a specialist-nurse, counsellor and gastroenterologist we often have IBD-patients posing an array of different questions. Many patients feel they lack knowledge about their disease. Earlier studies [1, 2] have indicated that the information for IBD-patients may be insufficient and that the patients request further information. Yet, other studies have shown decreased QoL scores after disease-related information using booklets has been provided [3], as well as a poor correlation between the level of disease-related patient awareness and QoL scores [4].

Method

IBD-patients (in remission or low activity) were interviewed and randomised to intervention or control groups. The intervention comprised nine weekly sessions, with lectures and group treatment. QoL was measured by Inflammatory Bowel Disease Questionnaire (IBDQ), coping by Sense of Coherence Scale (SOC) before, at 6 and 12 months. Evaluation of the intervention was made by a Visual Analogue Scale (VAS) and a content analysis was carried out for patients' written comments, immediately after the intervention was concluded, at 6 months and at 12 months. The control patients received conventional medical and psychosocial treatment during the study period and answered the questionnaires at corresponding times.

Results

45 patients were included, 24 in the intervention group and 21 in the control group. Mean age was 36.6 yrs (range 18-71) and 39.0 yrs (21-59) respectively. IBD duration was 4.6 yrs (1-11) and 5.0 yrs (1-10). The mean IBDQ showed no significant differences before (174) or after the intervention (176) at month 6, or when comparisons were made between intervention (172) and controls (174) at month 12. There were no significant differences in SOC scores when comparing the intervention group (139) with control group (148) before study start, or when comparing scores before intervention and after 3 months (138 and 150 respectively) or at 12 months (137 and 146 respectively). However, the mean VAS values and the results from the content analysis showed a positive trend.

Conclusions

There was a discrepancy in outcome between the questionnaires (showing no change over time and no differences between intervention group and controls) and the positive results from the VAS and the content analysis.

We conclude that a group-based educational intervention was highly appreciated by the IBD patients studied but no effect could be demonstrated using standard QoL or coping measurements.

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Wireless capsule enteroscopy: Bowel preperations is feasible and necessary

Background

1.800 IBD patients are treated at Herlev University hospital. From our unselected cohort the incidence of Crohn's disease has increased 800% from 1962-2005: 0.62/100.000/year to 6.8/100.000/year1. Localization of CD at diagnosis was: terminal ileum in 24%, colon in 38%, ileo-colon in 32% and upper GI tract in 6% of cases. Furthermore, obscure GI bleeding (OGIB) causing chronic GI blood loss from the GI tract is an increasing problem, and the source of bleeding remains unidentified in about 5% of patients2. These are the two main indications for capsule enteroscopy. The surgical and gastroenterological departments cooperate regarding Wireless Capsule Enteroscopy (WCE).

Aim

The aims were to obtain the most favorable conditions regarding examination and interpretation: to select the right patient population, and to optimize the bowel preparation by dinatrium-phosphate and dimeticon.

Methods

PillCam ® Imaging Capsule. Rapid reader® 3.0 software (2005).
Strict inclusion criteria were employed: Crohn's disease without stenotic symptoms or findings (verified by small bowel follow through (SBFT), endoscopy); OGIB (with normal upper and lower endoscopy performed by experienced endoscopists and a positive fecal occult blood test) after elimination of other risk factors as NSAIDs and aspirin discontinuation 1 month prior to WCE; suspected tumor/abdominal cramping (after SBFT and/or ultrasonography); indeterminate colitis after negative fecal bacteria test, microscopy parasites (with normal findings including biopsies at ileo-colonoscopy and negative transglutaminases for celiac disease).

Bowel preparation

After overnight fast the first 3 patients had a glass of water with diluted dinatriumphosphate 45 ml once daily (healthy controls, HC n=3) in the morning before WCE. Later the dinatriumphosphate regimen was modified to b.i.d. (at 1 and 6 p.m. the day before WCE) in order to optimize cleansing. Furthermore 100 mg dimeticon (10ml suspension) was supplied to minimize bubbles inside the ventricle before mounting the equipment and swallowing the capsule.

Results

28 WCEs were carried out, 2 patients had 2 procedures, 3 were healthy controls, 11 males, 15 females, median age 54 years (range, 16-84 years). 3 had only dinatriumphosphate 45 ml, but in these healthy controls intestinal contents hampered analysis in all. Hereafter 24 had dinatriumphosphate 90ml and additionally 10ml dimeticon. 20 of these (80%) obtained good cleansing of both the small and large bowel lumen, while 4 had only a moderate effect, and 3 were impossible to interpretate because of insufficient cleansing. There were no side effects to the bowel preparation, and none of the patients found the preparation unpleasant.
Indication OIGB: 12 (Findings: Angiodysplasias 5, colonic adenoma 1, duodenal ulcer 1, Watermelon stomach 1, worms 2, NSAID lesions in jejunum 1, normal findings 1), suspected IBD: 10 (Findings: Crohn's disease 5, small intestinal tumor 3, lymphangiectasia 1, inconclusive 1), healthy control: 3 (all were normal).

Conclusion

The new procedure revealed improved cleansing of the small bowel, especially in the colon, which is relevant since the capsules battery capacity has been extended from 8 hours to 10 hours. A future initiative at our endoscopy unit is in 2006 to train and accredit one nurse to be able to interpretate WCE data.

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Improving the care of patients with alcohol related health problems

Introduction

On the ward many diseases related to alcohol (ab)use are seen, such as liver cirrhoses and (acute) pancreatitis. In the nurses' files alcohol use and/or related problems of the patient are rarely reported and no further actions are taken to arrange professional help for the patient when the patient indeed has a problem. The general opinion among nurses is that alcohol (ab)use is not a big problem, they feel that it is a difficult subject to talk about. Recognising the problem and dealing with it, however, is a nursing task.

Aims
To create awareness among nurses to recognise an alcohol-related health problem and to provide care in such circumstances with the help of motivational interviewing theory. To determine the number of patients whose alcohol use is considered to be a health risk.

Methods
In cooperation with a psychiatrist, psychologist and social worker we started a survey to examine the alcohol use among our patients. 400 patients received the survey, the response rate was 50%. In the survey we asked patients about the amount and frequency of their alcohol use. Together with a social worker we wrote an information leaflet for patients. In this leaflet we described: the effects of alcohol, guidelines to healthy drinking behaviour and addresses/information about how and where to get help to stop drinking. Together with our colleagues from the psychiatric hospital we organized a clinic for nurses of the ward about motivational interviewing. During this 2-day clinic nurses became familiar with the theory of motivational interviewing and they got the chance to practice this new learned skill.

Results
Forty-two percent of patients said they never drank alcohol. Twenty-one percent said to drink at least four times a week. Almost ten percent said to drink 7 or more units on a average day. Sixteen percent reported to drink more than average. The rest of the results were miscellaneous. Right from the start of the project an increase of the nurses' attention in picking up signs and symptoms regarding alcohol (ab)use was observed. This was reflected in a more frequent reporting of alcohol use (amount and frequency) in the nurses' file. After the motivational interviewing clinics the number of patients who were sent for consultation of the social worker increased. More patients got a better aftercare, reflected in the number of patients referred to specialised alcohol clinics.

Conclusions
The outcome of the survey shows there is a demand for guidelines regarding nursing GI-patients with alcohol related health problems. This group of patients may not always themselves ask for help. It can be difficult for the nurse to deal with this problem and it requires special skills. Motivational interviewing may be a good method to detect and deal with alcohol problems in GI-patients.
We developed a form with standard questions based on motivational interviewing. This form has been standardised to detect and talk about alcohol-related problems.

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Why do cirrhotic patients fall? Description and analysis of falls in a hospitalization unit

Introduction
The nursing diagnosis of Risk of lesion acquires great importance in the hospital setting as regards falls suffered by patients. These become a health problem and are used as an indicator of quality assistance. Cirrhotic patients, because of the characteristics of their illness, are a risk group for falls.

Aims
Describe and analyse the falls of cirrhotic patients in the Hepatology Unit of the Hospital Clinic (HC) in Barcelona in order to identify patients with a high risk of falls and risk factors.

Patients and methodology
This is a cross-sectional observational study to identify the prevalence and risk factors of falls in cirrhotic patients hospitalised from January 1998 to December 2003. The data has been obtained by means of the standard form of the hospital for fall registration filled out voluntarily by the nursing staff.

Results
The total number of falls registered in cirrhotic patients was 53, the average age being 64 years. The distribution of falls according to type was: 72% were expected or foreseeable falls, 17% were accidental and 11% were unexpected. Of all the falls registered, 47% took place during the night shift, 30% during morning time and 23% in the afternoon. Location of fall, in order, were bathroom (45%), bed (36%) and chair (11%). 69.8% of the patients who suffered falls had mobility problems and 37.8% were disoriented. 41.5% of patients had no preventive means at hand. There was a close link between the type of fall (anticipated versus the rest) and the type of decompensation (encephalopathy, versus others). Thus, in patients with hepatic encephalopathy 23 (85%) of the 27 falls were anticipated, that is, foreseeable, versus 15 (57.6%) out of 26 in the remaining patients ($p = .024$).

Conclusions
The data analysed have allowed us to identify a group of patients within our unit who are at greater risk to suffer foreseeable falls. These are cirrhotic patients who have been hospitalised mainly due to encephalopathy, who are disoriented and with mobility difficulties, who mainly fall at night, are alone, have no preventive measures, and fall from bed or when in the bathroom. A correct identification of patients with high risk of falling and the analysis of the causes which have produced a fall, will allow the nursing staff to properly address the needs of cirrhotic patients hospitalised in our unit.

Learning outcomes
1. Falls are common in hospitalised patients with cirrhosis, and encephalopathy is the main risk factor. Most of these falls are predictable.
2. Proper identification of patients at high risk by the nurse staff should result in a reduction of falls in this population.

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A course of instruction for women with Irritable Bowel Syndrome

Objective

Irritable Bowel Syndrome (IBS) is a global, functional disorder with symptoms attributable to the mid or lower gastrointestinal tract [1]. There is no cure and the therapy has to be symptomatic [2]. The aim of this study was to determine the effects a course of instruction about IBS might have over time on the long-term outcome on symptoms, psychological well-being, and in health care requirements.

Participants

Twenty-nine women (median age 40, range 20-65 years) with IBS and without other chronic diseases, participated in a Course of Instruction at the Department of Medicine, Malmö University Hospital. The diagnosis IBS was verified by the patients´ medical records and the patients had suffered from IBS between 4 and 50 years, mean 12 years. The data were collected between November 2002 and May 2004.

Instruction programme

The course of instruction was developed and given by a group of professional clinicians; one physician, two registered nurses, one dietician, and one medical social worker. The Course of Instruction was organized by a nurse and consisted of four lectures, each of two hours' duration, included information about medical care, physical activity, stress-management, diet and health-insurance.

Methods

The women completed two self-administered questionnaires; the Gastrointestinal Symptom Rating Scale and the Psychological General Well-Being Index before and 1, 6 and 12 months after the course. They also provided information about their health care consumption, medications, and sick-leave from work or school before the course and 12 months after. Directly after the women had finished the course, they also completed a questionnaire on the content of the instruction course.

Results

Twenty-three of the women included, completed the questionnaires at 12 months after the course and when comparing these values to those at baseline, there were improvements in the scores of abdominal pain ($p<0.037$) and vitality ($p<0.045$). There were also a reduction in the number of visits to physicians ($p<0.037$) and dieticians ($p<0.042$).

Conclusion

Evaluation of this Course of Instruction showed that information led to a trend for women with IBS to perceive less pain and more vitality, and thereby experience a higher quality of life. The women were also pleased with the education. According to other studies [3] health-promoting behaviour in women with IBS can be improved by education.

Practice Implications

A course of instruction for patients with IBS may be of benefit for the patients, and could be a part of a multicomponent approach in the treatment of this patient group. A Course of Instruction can be organized by a nurse and could be held at primary care centres as well as at hospitals.

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Paradoxes in patient information - Assessing and auditing patients understanding of endoscopic procedures using information technology

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Introduction
Providing patients with information prior to any investigation or invasive procedure relieves anxiety and increases their levels of understanding, (Craig 2004). By increasing the level of understanding patients are given the autonomy to enter into discussions regarding their care. As a result they are able to make an informed choice. (Lan Yin Chi 2004)
The level of understanding that patients have in relation to the information they receive for endoscopic procedures is difficult to assess, therefore a means of assessing the patients understanding of information provided to them requires attention.

Objective
To determine whether the information provided to patient is understandable, and written by the appropriate healthcare professional, and delivered in an effective manner.

Method
Data was collected over a three month period, using a specifically designed computer program (ADAM) designed and written by nurses working within the department. This data is collected at the time of the patients pre-assessment, on arrival in the department. The questions asked are specific to the information booklets, consent forms and understanding of the information, which the patients receive via the post.

Results
968 Patients were pre assessed
3% of this number had not received information
1% had not understood the information
32% had not signed the consent form.

Summery
The vast majority of patients are receiving information before their procedure and understanding it. The consent form is a complicated form, and for some patients, a difficult to understand document.

Conclusion
The level of information provided for patients regarding endoscopic procedures is understandable; however the consent form is rather more difficult to interpret. As the consent forms are designed to meet the Dept Health criteria (Dept Health 2001), it is not possible to formulate any adjustments to increase understanding at present.

Learning outcomes
Audit is an ongoing process and since the introduction of technology it has provided the departmental nurses the opportunity to constantly evaluate, review and improve clinical practice. We now have a baseline measure to assist in the evaluation of the information we provide and the level of understanding people have regarding their endoscopic procedures.

Impact of video information before colonoscopy on patient satisfaction and anxiety – A randomised trial

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Aim
A high degree of anxiety before colonoscopy may have adverse consequences and increase requirements for sedation and analgesics. We aimed to compare the effects of combining our usual written and oral information with an information video.

Methods
All patients scheduled for colonoscopy were considered for enrolment. Patients were approached 3 to 20 days before colonoscopy and were randomly assigned to video or no-video groups. Both groups received written and oral information, whereas the patients in the video group were taken to a separate room to watch a 5 min. videotape on colonoscopy procedures and cleansing. The patients' situational anxiety was measured immediately before the colonoscopy by the Spielberger state-anxiety self-evaluation questionnaire (STAI). After reversal of sedation, patients rated overall satisfaction with the procedure. The colonoscopist and the endoscopy nurse, who were blinded to the patient's allocation, also completed questionnaires on use of medication, procedure time and an overall rating of the success of the procedure.

Results
200 patients were included and 162 were evaluable (103 women and 59 men, age 17 – 86 yr). The two groups were well balanced concerning, age, gender, previous colonoscopy experience and other baseline data. There were no differences between the two groups concerning patient satisfaction, situational anxiety (mean STAI 45.0 ± 13.3 vs 45.9 ±12.9, $p=0.7$), the completeness of colonic cleaning or the time used for the colonoscopy. The colonoscopists and the nurses rated the outcome equally in the two groups. There was no difference in use of sedation but patients, who had seen the video, used significantly higher doses of analgesics ($p< 0.02$).

Conclusion
An information video shown to patients preparing for colonoscopy had no impact on anxiety or patient satisfaction, but lead to increased use of analgesics.

Gender affects the outcome of colonoscopy – Results from a randomised trial

Aim

Performing colonoscopy is usually considered more difficult in women, but systematic studies are scarce and conflicting. As part of a randomised trial assessing the impact of an information video on precolonoscopy anxiety, we explored gender differences in patient tolerance, anxiety and satisfaction.

Methods

Patients scheduled for colonoscopy were randomly assigned to receive written and oral information or the same information plus a five min. information video. 162 patients (103 women, mean age 53.0 yr and 59 men, mean age 53.4 yr) completed the trial. The patients' situational anxiety was measured immediately before the colonoscopy by the Spielberger state-anxiety self-evaluation questionnaire (STAI). After reversal of sedation, patients rated overall satisfaction with the procedure on a 10 point scale, abdominal pain and discomfort (10 point scale), and willingness to have the procedure performed again. The colonoscopist and the endoscopy nurse, who were blinded to the patient's allocation, also completed questionnaires on use of medication, procedure time and an overall rating of the success of the procedure.

Result

The women rated situational anxiety significantly higher compared to men (mean STAI 48.0 ±12.7 vs 41.6 ±12.8, p=0.005). Women found the procedure significantly more painful (4.9 vs 3.5, p=0.001) and they were less satisfied (p<0.05). Furthermore, 25% of the women (compared to 15% of males) were willing to have colonoscopy again only if they could have more medication. Women received the same amount of sedation (midazolam: mean 2.2 mg vs 2.2 mg, p=0.5) and analgesics (fentanyl: mean 82 mg vs 72 mg, p=0.08). Both the endoscopist and the nurse rated the colonoscopy as significantly more difficult and less well tolerated by women (p<0.03). Total procedure time was slightly longer for women (54.4 vs 50.1 min, p=0.2). Allocation to the information video did not affect outcome.

Conclusion

Colonoscopy is less tolerable and more painful for women and this is probably related to a higher degree of anxiety. Endoscopy personnel should be aware of these gender differences and adjust information and medication accordingly.

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Respiratory changes due to dormicum during gastroscopy

Introduction

Although rare, cardiopulmonary complications may occur during gastroscopy. The objective of this study was to explore the factors affecting cardiopulmonary complications during gastroscopy and to confirm the importance of pulse oximetry for the early recognition such complications.

Methods and Measurements

A total of 93 patients (36 female, 57 male) undergoing a gastroscopic procedure at the Endoscopy Unit of Bodrum Universal Hospital between January and April 2004 were included in this study. Pulse rate, blood pressure and pulse oximetry recordings were performed with 1 minute intervals for a total duration of 5 minutes. The intensity of sedation was classified as mild, moderate or significant according to Ramsay's sedation scale. Sedation was given to 68 patients 3 minutes prior to the procedure (midazolam, 3 mg, iv), and the remaining 25 patients were given no sedation. Information on factors such as the history of cigarette smoking, alcohol intake, chronic obstructive pulmonary disease (COPD) and cardiac conditions that may affect the rate of cardiopulmonary complications were collected. Patients with pre-procedural arrythmia or an oxygen saturation of less than or equal to 90% were excluded.

Results

COPD, cigarette smoking or cardiac conditions had no significant effect on the pulse oximetry measurements at 5 minutes. The oxygen saturation was significantly higher in alcohol consumers compared to those who reported no alcohol intake ($p < 0.05$). Midazolam (3 mg, iv) resulted in significant sedaation in 50 of 68 patients and moderate sedation in 18 patients. There was no association between sedation score and the level of education, cigarette smoking and COPD. Significant sedation was achieved with 3 mg of midazolam in 34% of patients reporting alcohol use and in 65% of patients who reported no use of alcohol (p=0.02). The remaining had moderate sedation. In the group with moderate level of sedation, oxygen saturation at 5 minutes was 97.3% ± 2.5, whereas it was 94.8% ± 2.6 in those with significant sedation ($p < 0.05$). No significant cardiovascular complications were observed in any patients.

Conclusion

Oxygen saturation is inversely related with the intensity of sedation. The need for sedatives was significantly higher in patients reporting regular alcohol use, which resulted in more favourable saturation in these group. Other cardiovascular risk factors are not directly associated with saturation.

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Comparison of two sedation regimes for diagnostic oesophago-gastro-duodenoscopy: A prospective qualitative survey

Backrounds & Aims

Patients undergoing oesophago-gastro-duodenoscopy (OGD) are often anxious and sedation is desirable to improve patient comfort. Endoscopists in Singapore commonly administer intravenous Midazolam and Fentanyl prior to performing OGD. To date, there are no local studies done on comparison between Midazolam versus Midazolam combined with Fentanyl for their effects and patient's satisfaction.

The objective of this study is to compare the acceptability and comfort experienced by patients undergoing diagnostic OGD using 2 different sedation regimes :

(1) I/V Midazolam

(2) I/V Midazolam combined with I/V Fentanyl

Methods

This was a prospective qualitative study, comprising the administration of a questionnaire to 100 consecutive patients who underwent diagnostic OGD at Changi General Hospital. 50 patients were sedated with intravenous Midazolam alone while 50 patients were sedated with a combination of intravenous Midazolam and Fentanyl. All patients gave informed consent for the study. The questionnaire was administered 120 minutes after completion of the endoscopic procedure. The questionnaire consisted of questions pertaining to the patient's memory of events, comfort during the procedure and overall satisfaction with the procedure.

Results

92%(46/50) of patients who were sedated with Midazolam alone reported an overall satisfaction of having had an excellent or good experience compared to 74%(37/50) of patients who sedated with a combination of Midazolam and Fentanyl. The remaining patients in both groups reported an overall satisfaction of having had an acceptable experience. No patients reported having had a poor or terrible experience.

The main reason for a poorer level of satisfaction among the patients who received combination sedation with Midazolam and Fentanyl was nausea.

Conclusion

The use of intravenous Midazolam as sedation for diagnostic OGD is sufficient to achieve a good to excellent level of satisfaction among patients. The addition of intravenous Fentanyl did not increase the level of satisfaction. Instead, the side-effects of Fentanyl resulted in a decrease in the level of patient comfort and satisfaction. The routine use of intravenous Midazolam in combination with intravenous Fentanyl is not recommended. Other benefits of not using intravenous Fentanyl would be reduced cost and reduced use of controlled drugs.

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Music therapy reduces patients' concerns during gastrointestinal endoscopy

Few nurses and doctors are trained in dealing with these concerns but rely on their technical and communication ability. Patients´ anxiety might have negative influence on the investigation: the endoscopy might be more difficult and the patient migth report more pain. To deal with this, patients get sedative medication, but the possible complications and limited driving ability should be considered against the benefit. Complications in GI endoscopy are often results of intravenous sedation. The medical literature describes plenty of alternative treatments for replacement or reduction of anxiolytic medication: for example detailed information, relaxation techniques, hypnosis or music therapy. In the context of GI endoscopy music therapy means listening to either self selected or institutionally provided relaxation music.

A Medline search using the key words endoscopy, and music revealed 13 original articles, dealing with the influence of music on anxiety during GI endoscopy. All studies demonstrated, that music therapy during GI endoscopy was well accepted by all patients. Six of nine studies which evaluated the amount of anxiety, demonstrated a reduction in those, who received music therapy. Three of six studies showed a reduction of blood pressure and heart rate as well as subjective well being compared to control groups. Two papers described a reduction of the stress hormones ACTH and cortisol, but not adrenaline or noradrenaline in the music therapy group. Four studies investigated the need of sedative medication. In three of these studies the music group needed a lower dose of medication. One study compared examination time and completeness of colonoscopy with and without music. In comparison with the control group the examination time was shorter and the cecum was reached more often in the music group. Negative consequences from music therapy only raised in one study when background music distracted some doctors and nurses from concentration.

Conclusion: music therapy is a cheap and simple instrument to reduce patients concerns during GI endoscopy and is easily applicable by every nurse.

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Nursing support in the endoscopic management of elderly and advanced age patients with symptomatic choledocholthiasis

Background
Endoscopic Retrograde Cholangiopancreatography (ERCP) Endoscopic Sphincterotomy (ES) and stone extraction is widely accepted as the initial treatment of choice for a patient of any age with symptomatic choledocholithiasis. This treatment is especially favored in elderly and high risk patients, for whom surgical bile duct exploration carries a high morbidity and mortality.

The aim of this study was to underscore the nursing staff assistance of a single Endoscopic Unit, in Endoscopic management of elderly and advanced age patients with symptomatic choledocholithiasis.

Methods
During a nine year period, a total of 324 consecutive patients with symptomatic choledolithiasis (acute cholangitis, obstructive jaundice, colic), older than 75 years underwent ERCP plus ES. These patients were classified into two groups. The advanced age (Group A) patients were 35, 90 years or older (median age 92 years) and the slightly younger (Group B) were 289 patients, between 75 and 89 years (median age 75 years).

Endoscopic modalities used were: Endoscopic Sphincterotomy (conventional or needle knife), duct clearance by means of a Dormia basket or balloon catheter with or without mechanical lithotripsy, biliary drainage with the use of stent or nasobiliary catheter. Complications concerning the nursing staff support and the use of endoscopic devices and equipment were recorded.

Results
A total of nine mild complications were recorded. There was no statistical significant difference between the two age groups. Complications from nursing staff supporting operations in both groups [A/B]: acute post-ERCP pancreatitis 1 [0/1], bleeding 1 [0/1], acute cholangitis 1 [0/1], atelectasis in 1 [0/1] patient. Complications from inappropriate use of endoscopic modalities or mechanical failure: basket breaking 2 [1/1], balloon fraction 1 [0/1], stent migration 2 [1/1]. All of these complications were managed conservatively.

Conclusions
The low incidence of complications recorded in Group A was related to simple and quick nursing operations. Nursing staff contribution in endoscopic procedural success and in the effective and safe outcome of therapeutic ERCP for the management of elderly and advanced age patients with symptomatic choledocholithiasis is essential and mandatory, especially, for the avoidance of complications related to the technique and treatment devices that were used.

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Clinical Nutrition in a Danish Regional Community: A questionnaire-based survey among home care nurses

Introduction

Undernutrition is frequently not recognized in the community in general and in older people in particular. Preventing undernutrition keep the weak and elderly well and unhospitalised for longer periods. It is therefore of great value, that nurses and other caregivers are able to assess actual and potential undernutrition in order to be able to act accordingly at sight.
The starting position of the investigation came out of the county, whereas the investigation itself took place by nurses working in the community.

Background

The nurses in the community are, in general, older and more experienced, which also often makes theire education more at a distance. The nursing epikrises by discharge does not include a headline of "nutritional aspects" which allows the quality of nutritional rapportation to be rather coincidiential. By former investigations inside the hospital, it was concluded that lack of accomodation of responsibility was one of the main barriers for nutritional therapy.
Given these circumstances it was relevant for the questionnaire based survey to focus on questions of

- Relevance of clinical nutrition in home care nursing.
- Educational aspects.
- Communication between hospital nurses and home care nurses.
- Accomodation of responsibility towards nutrition for patients discharges from hospital.

Aim

The aims of this study were to

- Identify barriers within acting upon undernutrition among home care nurses.
- Get suggestions for progress within an active nutritional therapy in the community.
- Start a dialogue between the hospital and the community to suggest plans of action for future cooperation.

Material and Methods

A questionnaire-based investigation was made in March 2003 among 832 nurses in the county of North Jutland, Denmark (520.000 inhabitants), - a well defined geographical area consisting city as well as countryside. The questionnaire included demographic data,

Relevance: *Did you attend nutritional education within the last 2 years?*

Concidering the clients you attend in your daily job, how do you estimate the division between over- normal- and underweight?	Answer by home care nurses
Overwight	29%
Normalweight	49%
Underweight	22%

	Answer by home care nurses
Yes	13%
No	87%

Given a case about an average patient in nutritional risk – discharged from hospital, the nurses were asked about how they would assume the assignment of responcibility towards the nutritional problem?

Responsible for the patients nutritional recovery	Answer by home care nurses
Practitioner	6%
Home care nursing staff	41%
Hospital	22%
Patient	5%
Family	0%
Responcibility not clear	26%

How well do you agree in the following statements?

	Answer by home care nurses*
I lack knowledge of how to enter nutritial problems	77%
I do not feel prepared to teach properly in diets to undernourished clients	66%
I lack methods to identify undernourished clients.	83%
There is a lack of educational opportunities about nutritional problems	92%

**Completely or mainly agreed*

barriers including how relevant the investigation was found. Furthermore, the nurses were asked about their management of nutritional therapy, educational aspects, knowledge of clinical nutrition, ability in handling nutritional matters, and responsibility and corporation with hospital and general practitioners.
The nurses were assured anonymous treatment of their response.

Results
Overall, 321 responded to the questionnaire (39%). The nurses had 20 years of experience with an age of 45 years (mean).

Relevance
Fifty-eight percent agreed that assessing nutritional risk is mandatory in home care nursing, and 92% were often involved in nutritional therapy of the clients. However, 77% stated that focus on nutrition was lacking. More than 90% agreed that nutritional therapy had a well documented effect.

Education
Only 13% attended lectures in clinical nurition within the last 2 years, 77% lacked knowledge and 82% needed specific screening tools. Ninety-two percent stated that education should be established more often.

Communication and responcibility
There was disagreement in assigning responsibility between hospital and home care nursing, and nearly 75% stated, that communication between hospital and home care givers was insufficient.

Conclusion
Detection and treatment of undernutrition in home care nursing is found relevant by the nurses. However, the presence of barriers: lack of focus, means og identification patients at nutritional risk, knowledge concerning nutritional aspects, and assigning of responsibility are issues to overcome. Furthermore, establishment of a multidiciplinary plan of action involving hospital staff as well as community staff is needed.

Future planning
A study concerning concluded defectives is now taking place, and is due to conclude by january 2005.

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The aim of the investigation is to evaluate the effects of a recently developed **speciality inclined in-service education for nurses employed in abdominal surgical departments** on the participants' nursing skills and competences in their clinical practices.

The requirement for quality in nursing care for patients in the abdominal surgical speciality is that the nurses are qualified to carry out the work related assignments and able to manage the challenges which the health service and patients demand.
With reference to the above, collaboration between the leading nurses of the 7 abdominal surgical departments in the Greater Copenhagen area was established in the autumn of 2002.The aim was to develop a speciality inclined in-service education which could bring abdominal surgical nursing into focus and improve its quality. The collaboration has resulted in two complimentary in-service educational courses, level 1 and level 2.
Level 1 focuses on new scientific knowledge within nursing and medicine, with the aim of qualifying nurses to meet the needs and requirements of abdominal surgical patients. Level 1 is planned as 16 course days over a period of 4 months. A total of 77 nurses have completed 3 separate courses since the autumn of 2003.
Level 2 focuses on sequences of events typically for patients from the participants own clinical practices. The sequences of events are then the basis for theoretical analysis, reflection and exercises. The aim is to qualify the nurses to contribute towards assessing and developing nursing care in their own clinical practices. In order to ensure that their achievements have an effect the participants are associated with a mentor from their own ward. Level 2 is planned as 18 course days over a period of 10 months.
18 nurses have completed the first course since the autumn of 2004.
The participants of both level 1 and level 2 evaluate the teaching contents, the literature and the relevance for their clinical practice, inclusive development of their personal competences with respect to their nursing skills towards patients.
The evaluations have shown a high level of participant satisfaction with respect to the teaching, the literature and the relevance for clinical practice. The attendance rate for the course days was 95 – 100%. The evaluation methods have not shed light on which effects course participation has had on the development of the nurses' clinical competences. However, statements from the nurses' closest leaders point towards different positive effects in their clinical practice.
The present challenges are concerned with spreading an in-service education within the abdominal surgery speciality for the whole of Denmark. The formal collaboration for this has been established.
Furthermore, work is being done on developing the content, the organising and the method of evaluation with respect to creating an in-service education which has a clearer impact on the nurses' clinical work.

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Reform of higher nursing education in transitional country: A self assessment as a first step

Objective

In accordance with country needs, it is priority to set up a fundament for reform of higher nursing education in Bosnia and Herzegovina (BH), as transitional country, with purpose to reach professional standards set by other European Union members (1).

Method

Self assessment done through interviews with students and teachers, analysis of existing documents in Faculty of health science, as curriculum, qualification and examination tests, and evaluation of teaching staff by students.

Results

Faculty of health science (nursing) Mostar in year 2004/2005 educate 144 students of nursing taught by 86 teachers, with student/teacher ratio of 1.7. According to analysis of curriculum dominates practical (57.2%) to theoretical education (42.8). The curriculum is subject orientated, not problem orientated. Besides, the official curriculum is 97% core, and 3% for electives. The catalogue of essential clinical skills does not exist. The nurses are taught same courses one can find at School of Medicine Mostar, in short version. Students have no influence on the form of teaching. In fact, evaluation of teaching staff is conducted 2 times a year, but without any consequences for badly evaluated teachers. Students are mostly evaluated on traditional way: only 15% of teachers use multiple choice tests and essays. The qualification test is transparent, but is not under multilevel control. Sixty-five percent of students successfully completed their studies within regular, expected time.

Conclusions

reform process is currently in progress in all five Schools of Medicine in BH. Without education reform of associated health workers, the quality of health sector will be insufficient. For this reason a reform of nursing education on three levels (2) is an issue of outmost importance. As a first step the self assessment report is made to establish base-line and identify strengths and weaknesses. The second step would be external evaluation of learning process in Faculty of health sciences in Mostar. We understand that would be an objective outsight to serve as a document for institutional development. After that the new curriculum for higher nursing education will be developed, in accordance with other schools in region and European standards. Finally, after introduction of new curriculum re-evaluation of Faculty performance would be done, with a task to compare the findings of first evaluation. Improvements and obstacles would be noted. We hope to publish results on permanent web site, to be used not only on national but on regional level in South-East Europe and other countries in transition.

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Ergonomics on the endoscopy unit

Introduction

Nursing staff and assistants working on an endoscopy unit are especially prone to ailments. Two nurses from our department have been trained to become so called "ergocoaches". It is the task of the "ergocoaches" to help their colleagues in being more aware of their responsibility in reducing the risk of ailments.

What are the problems?

Due to the workload on our unit and the high turnover of patients, there is insufficient attention paid to correct posture. Ailments can often occur due to frequent repetition of the same movement (RSI), incorrect posture for the duration of a procedure or patient transfers being carried out without the use of lifting or sliding aids. Problems may arise from situations such as too little space due to the amount of extra technical equipment, which is on the increase especially in hospitals that carry out a lot of research, x-ray equipment which is heavy and cumbersome and last but not least when the height of the treatment trolley / table is not suitable for the doctor and the assistant carrying out the procedure.

Problems can arise due to excess workload when there is not enough staff to assist with difficult transfers e.g. sedated patient transfer or patients whose movement is restricted due to the attachment of monitoring equipment, wound drains and in some cases multiple intravenous infusions.

The most common complaints are of the shoulder, arm, neck and lower back.

Tackling the problems

When the physical demands placed on endoscopy assistants have

to be addressed, we have to consider reduction of the workload, paying attention to the following points:

Communication:

- Inform the patient of what your intentions are
- Ascertain how much assistance the patient is able to contribute
- Ask a colleague to assist you

Environment:

- Create sufficient working space in order to carry out your work
- Assume the correct working height and position as much as possible
- Minimise obstacles and slippery floors

Patient Transfer:

- Avoid lifting a patient, use slide aids when possible
- Transfer patient with the bed at the correct height
- Transfer patient with a minimum of two people

Posture:

- Avoid working with your head turned
- Avoid working in a position in which you have to bend over more than 10%
- Avoid working with your hands above shoulder level
- Try to change position and movements
- Limit the amount of time muscles have to be contracted, especially with outstretched arms
- Take a few short breaks instead of taking one long break.

Conclusion

Ergocoaches have become indispensable on our department due to their coaching and awareness of human engineering. It is important to recognise problems and to reduce them. Prevention is better than cure.

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Evaluation of nursing education in gastroenterology in Bosnia Herzegovina: Everything should be changed

Objective

to survey nursing education in gastroenterology, to identify weaknesses and strengths, and after that to change nursing education in Bosnia and Herzegovina, with purpose to improve present status, in accordance to other similar Faculties in region and European Union (1).

Method

Survey done through analysis of curriculum and interviews with students and teachers of Faculty of health science (nursing) Mostar.

Results

According to analysis of curriculum education in gastroenterology at Faculty of Health Science (nursing) is done in traditional way, only through lectures, from textbooks. Problem oriented learning is not introduced. According students' interviews all subjects appear to have the same significance: there is no information which disease is rare, and which is very frequent or very serious. The catalogues of essential clinical knowledge and clinical skills in gastroenterology nursing do not exist. Compared to teaching of students at School of Medicine Mostar nurses are taught same courses, in about 50% shorter version without mentioning specific nursing procedures in gastroenterology. No distinctions between competencies of medical doctor and nurse in gastroenterology are mentioned.

Conclusions

Evaluation of nursing education in gastroenterology at Faculty of health science (nursing) Mostar, showed a lot of weaknesses. According to results of survey practical training should be introduced, along with seminars. It is also necessary to introduce problem based learning, but before that to educate young teachers to use new teaching methods. The Profile of Competencies for graduated students would be one of the priorities. That is obvious that teachers (mostly medical doctors) at Faculty of health science have no idea about the difference in education at School of Medicine and Faculty of health science (nursing). In fact, they have the same position in both schools. According to this survey the process of making "small doctors" instead of nurses is in progress. For this reason a reform of nursing education on three levels (2) is an issue of outmost importance. Educated nurses would have more understanding about the difference between education for nurses and doctors of medicine. The first step of reform is done through this survey of present situation in nursing education in gastroenterology, to establish base-line and identify strengths and weaknesses. As strengths are not present the radical reform (not to mention revolution) should be made. The second step would be external evaluation. After that the new curriculum for higher nursing education in gastroenterology (and wider) will be developed, in accordance with European standards.

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A new era of endoscopy

Background

At the end of 2002 a new era of endoscopy was initiated in the LUMC, the M2A wireless video capsule endoscopy (now called Pillcam).

This capsule is the size of an antibiotic capsule and can pass through the entire GI tract from mouth to anus. Taking 2 images every second leading to a film of 7-8 hr. The only preparation needed for the patient is an overnight fast and no oral medication.

The gastro-entrologist screens and judges the application. At present the endoscopy nurses take care for the application.

Two experience endoscopy nurses participate in the assessment of the images.

During the course of the study, approximately 50,000 images are transmitted to a datarecorder worn on a recorderbelt.

The assessment of the procedure itself consists of creating thumbnails images on the desktop of a computer. Viewing and thumbnail creating time is 45 à 60 min. for nurses. If possible a commentary is added. The responsible gastro-entrologist screens the images produces thumbnails too and compares his own thumbnails with those made by the nurse. The chance of missing abnormalities there for was minimal due this double assessment.

Our poster presentation showed a broad range of findings of the 100 Pillcam endoscopies done in this way.

100 Pillcam's were performed in 2 years

- Complete small intestine recording 70
- Incomplete small intestine recording 15
- Uncertain whether the coecum was reached 15

In two patients the capsule discharge was uncertain. But on further examination it became clear that they did not leave the GI tract. The one patient the capsule got trapped in the pouch and had to be removed using endoscopy in a so called basket. In another patient the capsule was trapped in the small intestine for 42 days, caused by a stenosis. Before the planned surgery the capsule left the body on a natural way during bowel preparation.

The Pillcam has the potential to be a valuable diagnostic tool and introduces an era of a new dimension in endoscopy.

Pillcam endoscopy is a patient-friendly examination.

The analysis of the sampled images and selected thumbnails gives a new dimension to the practice of our profession.

Screening the images increases our knowledge of the GI tract.

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INVITED PRESENTATIONS

Advanced technologies for improved GI disease management

(Workshop of Boston Scientific)

"Short wire systems - Making a Difference in ERCP"

The role of both the nurse and the doctor during ERCP procedures has been changed by short wire systems since the "Rapid Exchange" RX biliary system was first introduced in 1999. These systems allow the guidewire to be controlled by nurse or doctor, for the wire to be locked in place during therapy and exchange, and for a choice between long and short wires.

Short wire systems give additional options for wire-guided cannulation, potentially reducing the risk of pancreatitis , and also additional options during therapy.

This workshop will also include practical demonstrations of whole procedures in stone extraction and stricture management, showing how the RX biliary system changes nursing practice in the ERCP room.

"Clipping evolution - design and use"

Gastrointestinal bleeding continues to be one of the most common emergencies in gastroenterology practice. The source of bleeding, in approximately 90% of the patients, is identified in the upper gastrointestinal tract, while the extra 10% is localized in the lower GI tract (9% in the colon and 1% in the small bowel). This explains why most of the lesions are accessible for endoscopic treatment.

Clipping devices have been shown to be useful in a range of areas, and in some cases may have significant advantages over other treatment options . As clipping has developed, the application base has broadened from acute haemostasis to some other related areas. For example, the Resolution™ Clip Device in intended to be used for hemostasis, endoscopic marking, closure, and anchoring jejunal feeding tubes. Key advances have been made in the design of clips, from devices where clips had to be loaded prior to use to the versions available today where wider-jawed, repositionable clips are available ready-mounted.

Fast-Track colonic surgery

Unit for Perioperative Nursing Care

In Denmark the Unit for Perioperative Nursing Care is established as a national initiative. The purpose is to promote the process of implementing fast-track surgery in all the surgical departments nationally. In connection with this a website has been established to create a forum for sharing knowledge and experiences from practice. The website contains evidence-based care programmes with links to reference lists as well as updated and relevant reference lists for the specialists: orthopaedic surgery, gastrointestinal surgery and gynaecology.

The development of evidence-based care programmes take-off form the workshops where nurses from the whole country are invited to discuss nursing care for selected surgeries. The aim of these workshops is to give recommendations for nursing care in the disciplinary fast-track surgery in the light of research results, nursing experience and involvement of the patient perspective.

Website: www.periopsygepleje.rh.dk
www.periopnursing.dk

Results of the workshops

Nursing research internationally has at this time enough research results especially within the qualitative research, in the perioperative period as well as the quantitative research and nursing experience to show action for nursing care in fast-track surgery.

Protocol for the preparation period: security and individual consideration, information < 12 hours preoperatively, interview and music instead of medication, personal attitude. Areas of focus are pain, nutrition and mobilisation.

Protocol for admission: involvement of the patient, knowledge of the process, nurses taking time for the patient. Areas of focus include sufficient pain treatment, nutrition supplement and early mobilisation. The goal for care and treatment is laid out as discharge criteria.

Protocol for rehabilitation and convalescence: focus on the patient and the relative's adherence, basal needs and resumption of activities.

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Conclusion and implications

It is assumed from the experiences of the first years that the collaboration can have a great influence for optimising the surgical pathways in the future of the health care system. It is a challenge for the professionals and management, which contains national and interdisciplinary aspects.

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Education of Endoscopy Nurses - A survey update in European countries

Introduction

After completing basic nursing training and passing the state examinations, nurses are able to work in endoscopy departments without further mandatory job specific education. Since the eighties specialist education courses for endoscopy nursing have been established in many European countries. Since 2002 the ENNO Framework gives new recommendations for post basis nurse education (1).

Aims

The aim of the survey was to update the data about endoscopy nurses education in Europe, to contrast differences and similarities and to evaluate the compliance with European recommendations.

Method

A first data collection was done in 1998 by circulating a questionnaire to national endoscopy nurses societies in 33 European countries. In February 2005 a second questionnaire was sent to the same countries. Collected Data from 1998 and 2005 were evaluated and compared.

Results

Data from 28 countries could be evaluated. Three categories could be identified:

1. No specialist training

8 of 28 countries (Greece, Iceland, Jordan, Luxembourg, Malta, Portugal, Switzerland, Turkey) have not had any specialised courses for Endoscopy nurses yet. They offer a huge variety of continuing training and use courses in neighbourhood countries.

2. Short courses of 1-8 weeks

have been established in 7 countries (Belgium, Croatia, Denmark, Poland, Romania, Slovenia, Spain). These courses are mainly focused on GI endoscopy, have more the character of continuing education. 3/7 courses lead to an official recognition.

3. Intensive courses of 5-24 months

have been established in 13 countries (Austria, Czech. Republic, Finland, France, Germany, Hungary, Ireland, Israel, Italy, Norway, Sweden, UK, NL). These courses follow an official core curriculum, offer theoretical and practical training, lead to a recognised qualification. Courses based at university have been established in Finland, Ireland, Italy, Sweden and the UK. Endoscopy courses in Germany can be combined with OR courses.

14 countries changed the format of their courses between 1998 and 2005 by

- increasing the length of the course, the number of theoretical and practical hours (11 countries)
- increasing the academic level (e.g. masters degree) (3 countries)
- receiving the official recognition (3 countries)

Conclusion

Specialist education for endoscopy nurses have been established in 20 European countries. Courses vary in length, content, academic level and official recognition. Short courses do not fulfil EU regulations while 70% of long courses fulfil the ENNO recommendations.

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At the end of the session the participants should be able to
1: understand the differences in education of Endoscopy nurses within Europe
2: know the European regulation relevant for education of Endoscopy nurses

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Evaluation of the National Screening Programme for Colorectal Cancer in Germany

Summary

Background
Screening of individuals who are over 50 years of age and without symptoms of colorectal cancer (CRC) but at average risk for the disease has been advocated by many organizations and expert panels. Although there are no randomized trials on the effect of colonoscopy and consecutive polypectomy on incidence and mortality due to CRC, there is plenty of indirect evidence that screening colonoscopy may favorably influence both parameters. The efficacy of screening colonoscopy in general use remains to be determined. Here we present the data of screening colonoscopies performed in almost 116,000 patients and evaluated by means of an electronic database. An online documentation systems was established which allowed validation of the data during the processing of data. Here we report the data of a nearly 2-year period collected in a nation-wide online registry.

Methods
Data from consecutive screening colonoscopies in the practices of the 280 participating gastroenterologists performed in asymptomatic subjects (age 55 to 99 years, mean: 64 years) were collected in an online registry. Number and histology of colorectal polyps and carcinomas, complication rates of colonoscopy and polypectomy were registered. Advanced adenoma was defined as an adenoma ≥10 mm in diameter, villous or tubulovillous in histology, or presence of high-grade dysplasia.

Results
A total of 115,937 colonoscopies (male 43%) could be evaluated from October 2003 until August 2005. Tubular and villous/tubulovillous adenomas were found in 15.9% and 3.7%, respectively, whereas invasive cancers in 0.7%. Advanced adenomas amounted to 7%. In 91% of polyps > 5mm and < 30 mm immediate polypectomy was carried out. In 313 of the 768 carcinomas detected during colonoscopy, early stages made up the majority (UICC stages I and II in 46% and 24%, respectively). Complication rate was low and no fatalities were observed: cardiopulmonary in 0.08% of the colonoscopies, bleeding in 1.1% of polypectomies most of which were managed endoscopically (surgery in 0.03% of polypectomies). Perforation occurred in 0.02% of the colonoscopies and 0.14% of polypectomies.

Conclusion
Colonic neoplasms are detected in about 20% of subjects, most of which can be immediately removed by polypectomy. The stage shift towards UICC stage I of cancers detected by screening colonoscopy is an indirect indicator of mortality reduction. Screening colonoscopy in Germany two years after introduction into the national programme for CRC-prevention appears to be effective because of high detection rates of colorectal neoplasms, a profound shift towards early stages of CRC and low complication rates.

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Health problems with disinfectants – Are the alternatives a safer solution?

Please see:
ESGE/ESGENA Technical Note on Cleaning and Disinfection.
Endoscopy 2003; 35: 869 - 877

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New ESGE-ESGENA Guidelines on Microbiological Surveillance

As part of a quality assurance programme in Endoscopy, microbiological surveillance is an important instrument to control the quality of the whole reprocessing cycle, to identify and redress mistakes and weaknesses during the reprocessing procedure and to prevent the transmission of infectious material and diseases through Endoscopy.

Aim of the guideline
The new ESGE-ESGENA-Guideline is focused on routine microbio-

logical testing, covering manual and automated reprocessing procedures. The aims of the guideline are to support:

- individual endoscopy departments to develop local standards and protocols
- national societies and official bodies to develop national recommendations and quality assurance programmes in hygiene and infection control in GI endoscopy

The guideline gives practical information about possible sources of infections and transmission of micro-organisms via endoscopic procedures, responsibilities and frequency of microbiological surveillance, the performance of periodic tests, the interpretation of results and the outbreak management:

1. Responsibilities

Microbiological surveillance is the responsibility of the service provider. In order to show evidence of the complete reprocessing cycle, routine microbiological surveillance includes testing of endoscopes, automated washer disinfectors (AWD), water systems (especially the last rinsing water) and filtration systems used in endoscopy units. If any contamination is found, it is the responsibility of the service provider to take the suspected piece of equipment out of service (e.g. endoscopes, AWD, etc), until a satisfactory biological test has been performed.

2. Frequency

Routine testing of endoscopes, AWDs and water systems should be performed every 3 months. In case of positive results (contamination), short-term repeat tests are necessary until the problems have been resolved. In case of clinical suspicion of cross-infection or epidemiological evidence suggestive of transmission of infection related to endoscopy, microbiological tests should be performed immediately.

3. Performance of tests

Microbiological tests of endoscopes must include the outer surfaces, all channels and the water bottle system. Depending on the design of the AWD, the options of collecting samples may vary.

4. Interpretation of results and outbreak management

In case of regular microbiological surveillance, a number of organisms can be used as indicators of weaknesses or mistakes in the reprocessing procedure:

- E. coli, enterococcus as indicator for insufficient cleaning and disinfection, defects of AWDs
- Pseudomonas aeruginosa as indicator for insufficient rinsing, drying and contaminated filter systems
- Staph. aureus and epidermidis as indicator for insufficient staff hygiene, insufficient transport or storage of endoscopes

A quantification of bacterial growth is recommended. A criterion for acceptability is the absence of growth of vegetative bacteria. If clinical or epidemiological data suggests the transmission of infection, the test methods should be focused on the suspicious organism, additionally to the routine test methods. The new guideline gives practical information how to trace the source of contamination and which appropriate steps have to be taken in order to correct the problem(s).

The Guideline will be published in ENDOSCOPY and on the ESGENA webpage: www.esgena.org

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Endobronchial ultrasound

Endobronchial ultrasound may be performed either using a radial probe inserted through the working channel of the bronchoscope or using a convex probe ultrasound bronchoscope that has an ultrasound probe incorporated at it's tip. The radial ultrasound probe (20 MHz frequency) is inserted through the working channel of the bronchoscope into the airways. Balloon equipped ultrasound probes can be inserted in bronchoscopes having working channels of 2.8 mm in diameter or more. In the larger airways, the tip of the bronchoscope can be flexed to bring the balloon in better contact with the airway wall. To perform transbronchial needle aspiration, the radial probe has to be first removed from the working channel and then the needle passed. The convex probe ultrasound has a frequency of 7.5 MHz is integrated at the tip of a flexible bronchoscope. It has a linear curved array transducer that scans parallel to the insertion direction of the bronchoscope. Images can be obtained by directly contacting the probe with the airway wall or by attaching a balloon on the tip and inflating with saline. The doppler mode assists in the confirmation of blood vessels. This system allows the bronchoscopist to perform real-time transbronchial needle aspiration under direct ultrasound guidance. The needle can be visualized through the optics and on the ultrasound image. The clinical applications include, staging of patients for lung cancer, diagnosis of unexplained benign and malignant mediastinal and hilar lymphadenopathy. The potential benefits of direct ultrasound guided transbronchial needle aspiration include, avoiding surgical procedure of mediastinoscopy by making a definitive diagnosis of mediastinal and hilar lymph node enlargement using flexible ultrasound guided bronchoscopy and it's potential impact on saving health care costs.

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Evaluation of bronchoscopy standards

Introduction

Flexible bronchoscopy is an important tool in the evaluation of pulmonary diseases. It is performed all over the world in different settings, varying from local anesthesia to intubation with general anesthesia. The choice of the way the bronchoscopy is performed is merely a matter of habit then of evidence based medicine. Dutch society of pulmonologist, NVALT, made a guideline under what circumstances bronchoscopy should be performed. During this session this guideline will be discussed along with the available evidence.

Little has been known about patient comfort undergoing flexible bronchoscopy. In some clinics there is the believe that bronchoscopy in supine position is better and some believe that sitting is preferable. Both groups believe that their own strategy is superior in terms of safety and patient comfort, but no evidence is available. The aim of this study was to evaluate patient comfort and safety of bronchoscopy in supine and sitting position.

Methods

The outpatients undergoing diagnostic bronchoscopy were included and randomly selected to be in supine or sitting position. Patients who had to undergo broncheoalveolar lavage or transbroncheal biopsy were excluded. A self-administered questionnaire was collected from the patients after the bronchoscopy about tolerance to the procedure on dyspnea, cough, fear and comfort using a scale from 1 – 6 (not much-much). Vital parameters as pulse, blood pressure, and oxygen saturation were monitored during procedure. A desaturation of more than 4 % was considered to be clinically relevant.

Results

A total of 58 patients were included until July 2005. 26 patients underwent bronchoscopy in supine position and 32 in sitting position. There is no difference in the two groups on patient comfort, cough, fear or dyspnoea score.

Saturation before flexible fiber bronchoscopy was > 95% in 83% of the patients. 24% received supplemental oxygen. There is a significant oxygen desaturation in all patients of 4.6% (SD 3.9). A desaturation of more than 4% is more common in the sitting position (5.9%) than in supine (3.1%) position. Twelve patients had a decline in oxygen saturation below 90% without a difference between both groups. FeV1% predicted is not a good predictor for decline in oxygen desaturation.

Conclusion

There is no statistically significant difference in patient comfort between supine and sitting position. Oxygen desaturation is common in flexible bronchoscopy and occurs more often in the sitting position. All patients undergoing flexible bronchoscopy should receive supplemental oxygen therapy.

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Everything you always wanted to know about transbronchial needle aspiration but were afraid to ask...

The main goal of this presentation is to give an overview of transbronchial needle aspiration (TBNA) from a nursing point-of-view, discussing background, techniques, ergonomics and the results of a new aspiration needle.

TBNA is a safe, minimally invasive technique in the assessment of patients with enlarged mediastinal lymph nodes. An introduction is given about the importance of mediastinal lymph node sampling in patients suspected of having lung cancer. Various techniques will be discussed that are available to obtain node samples, ranging from mediastinoscopy, endobronchial ultrasound techniques, endo-echo fine needle aspiration and mainly conventional TBNA.

Very good results have been reported with conventional TBNA (1,2). Different techniques using TBNA will be displayed, including practical tips and tricks when handling the needle itself. Recently, a new needle has been introduced by Boston Scientific, called the eXcelon needle, which is characterised by (nurse-operated) easy ergonomics and a very sharp needle.

We have conducted a prospective study concerning the yield of the histology and cytology samples using this new needle. Results will be discussed. (Results are currently under copyright restriction until presented at the European Respiratory Society conference in September 2005).

In conclusion, TBNA is a patient-friendly, easy to use and inexpensive method assessing enlarged mediastinal lymph nodes in which adequate nursing assistance is of great importance.

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What can be learned from this presentation?

1) The aim is to give an overview of why and how TBNA is performed from a nursing point-of-view and a comparison is made with other techniques.

2) The results of a new, easy to use aspiration needle will be discussed.

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News from Industry

Boston Scientific

New Stents in the G.I. Tract
Montse Agusti, Boston Scientific Endoscopy Marketing

Self-expanding metal stents are now available across a range of GI indications, from Oesophageal to Colonic and including biliary and duodenal stents. Stent technology is continually advancing, with the goal of improving clinical performance throughout the life cycle of the stent.

The clinical effectiveness of a stent can be measured in many different ways, including the ease of placement, the resistance to ingrowth and external force, the fit to the anatomy and the danger of complications. The performance of a stent according to these measures depends on various design characteristics.

- For ease of placement, possible factors include fluoroscopic visibility, flexibility and pushability of catheter, recapturability and design of deployment system. Deployment may also be easier if the stent can be deployed through the scope, over a guidewire.

- The fit to the anatomy is determined by the flexibility of the stent, and also the maximum diameter to which it can expand. A larger diameter of stent may offer improved obstruction relief and also reduced risk of migration.[4,5,6,7]

- For resistance to ingrowth and external force, the size of the cells within the stent and its radial force are critical, as is the overall design of the stent, and the material from which it is made.

- Specifically for an enteral stent, the risk of complications is determined by many design factors, such as a flared end to prevent migration[8] and looped ends to minimize the risk of trauma

Different design characteristics imply different clinical performance characteristics, but some features of a design may be at the expense of others, for example having a large diameter stent may lead to a large delivery catheter, making the stent harder to place. However, with new materials and design techniques, these compromises may be minimized.

For example, Boston Scientific has launched a new generation of enteral stents, the Wallflex™ Stents. They are large diameter stents mounted on a very low profile TTS system, able to track even under highly tortuous anatomies. If we compare the fluoroscopic visibility of these stents, their radial force and flexibility, their ability to be placed through the scope and finally their deployed outer diameter, we can see how using new materials such as Nitinol, coupled with new manufacturing techniques, allow us to produce a stent with excellent performance characteristics.

While different stents have different clinical performance, a combination of new materials and methods allow improvements in many aspects of stent use. The Wallflex™ Enteral is one example of a new stent with significant advantages over similar currently available devices.

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Fujinon

New generation

New generation of digital video-processors offer many more features than just transferring video signal to an image-monitor.

New features for digital future are

- DVI (Digital Video Interface)
- USB (Universal Serial Bus)
- DV (Digital Video)
- CF (Compact Flash)
- EtherNet
- FICE (Fujinon Intelligent Chromo-Endoscopy)
- Patient data management and more

Olympus

EXERA II – New Endoscopy System

As the pioneer of endoscopy, Olympus is committed to providing physicians and nurses with the tools they need to perform the most challenging procedures with confidence. That means designing endoscopes and accessories that are easy to operate and easy to maneuver, while offering the top quality and superior performance you need to achieve consistent, reliable results .You'll get all that and more with the all-new EVIS EXERA II 180 Series system. Featuring unprecedented image quality, state-of-the-art image processing capability, enhanced optics, ultra-slim design, expanded compatibility, and refined ergonomics, EVIS EXERA II sets a new standard of excellence for examination and treatment in the upper and lower gastrointestinal tract.
With EVIS EXERA II, Olympus is setting a new standard with endoscopic imaging and processing capabilities that have evolves to a new level. Advanced new features like HDTV (High Definition Television) put phenomenal imaging power at your disposal, enabling even minute capillaries and subtle mucosal structures to be displayed with life-like clarity. NBI (Narrow Band Imaging) gives you the ability to observe pit patterns and differentiation of lesions without the use of chromo endoscopy. Improved structure enhancement makes it even easier to discern subtle tissue textures and colour variations on the mucosa. Convenient Close Focus capability makes it possible to bring the scope tip so close to a site that the resulting macro images are virtually equal to magnified images. And, of course, if you need to magnify images, you can – electronic magnification capability is available to blow up images even more. And for more efficient image management, EVIS EXERA II is provided with digital outputs and direct storage capabilities on memory card.

EXERA II

- Clear and natural HDTV images with 1080 scanning lines
- Narrow Band Imaging – Chromo endoscopy at the touch of a button
- 100% compatibility with Olympus surgical equipment
- First super-slim 4.9mm gastroscope
- Extremely wide-angle colonoscope (170°)

Double Balloon Enteroscopy:
Indications, yield and complications in a serie of 275 patients with suspected small bowel disease.

Background
Until recently only the proximal small bowel was accessible for diagnostic and therapeutic endoscopy. We describe our experiences in the first 275 patients examined and treated with the new method of double balloon enteroscopy (DBE) which is expected to enable full length enteroscopy.

Patients and Methods
Between November 2003 and may 2005, DBE was performed in 275 consecutive patients referred to two tertiary referral hospitals. Patient characteristics, indications, procedural parameters and yield are described. All conventional treatment options were available. A tolerability assessment was performed in a small subset of patients. All patients were monitored for complications for for at least two hours at the recovery room.

Results
The main indication for DBE was obscure gastrointestinal bleeding (OGIB, 168 cases), and responsible lesions were found in 65 % and treated in 55 % of cases.
In cases with refractory celiac disease (25 patients) DBE showed a high proportion (23 %) of enteropathy associated T cell lymphomas (EATL's) not suspected on other tests (?). Further DBE indications were surveillance and treatment of hereditary polyposis syndromes (n=20) and suspected Crohn's disease which was diagnosed by DBE in (4/13 = 30 %) patients. In 24 % no relevant pathology was found. Panenteroscopy was successfully performed in 26 of 62 attempts (42%) in whom it was attempted in either one or two sessions. The average procedure duration was 90 min (range 30 to 180) and the average insertion length was 270 (range 60 to 600) cm. Patient tolerability was excellent. Severe complications were recognized in 3 cases (1 %), all pancreatitis.

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