

The sensitivity for all diagnosis was 83%, the specificity 99%, the PPV 99%, the PNV 69%, the LR+ 31.7, the LR- 0.17.

Conclusions: EUS-FNA is an easy and safe technique for cytopathological diagnosis of the mediastinal adenopathy with high accuracy and specificity. The PNV is low and so, in case of negative FNA and high clinical suspicion of malignancy it needs to be done again.

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A PROSPECTIVE EVALUATION OF EUS IN THE PREOPERATIVE STAGING AND RESTAGING AFTER NEOADJUVANT CHEMO-RADIATION OF PATIENTS WITH RECTAL CANCER

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Background and aim: Endoscopic ultrasonography (EUS) is highly accurate for locoregional staging of gastrointestinal tumors. In rectal cancer (RC) EUS allows to evaluate the tumor penetration depth into the rectal wall and detect lymph nodes metastases. The aim of the present study was to evaluate prospectively the accuracy of EUS in the preoperative staging of patients.

Material and methods: From 12/2000 to 5/2005, 118 patients (pts) with RC underwent EUS for locoregional staging of RC at our Institution. There were 61 men, and 57 women, with a mean age of 60 years (range 40-80). The EUS was performed in all cases using an echo-colonoscopy Olympus CF UM 20, with a 7.5 MHz radial scanner. Forty-seven pts (group 1) underwent surgery directly because of the early RC (T1-2, N0) or because not deemed for preoperative chemo-radiation (NAT). Seventy-one pts (group 2) underwent NAT before surgery because of locally advanced RC (T3-4 or any T, N+). In the latter pts, EUS was performed before and after NAT. In all cases, T and N stages at EUS were compared with the correspondent pTN stage of the surgical specimen.

Results: In group 1 EUS showed an overall accuracy of 81% for the T stage. When the T stages were analyzed separately, EUS showed an accuracy of 73% for T1, 64% for T2, 100% for T3 and 0% for T4 stage, respectively. Eight RC (17%) were overstaged, while a T4 RC (2%) was understaged. Moreover, EUS showed an overall accuracy of 66% for the N stage, with a sensitivity of 54% and a specificity of 69%. In group 2, EUS restaging (EUS-R) after NAT had an overall accuracy for T of 63% (28% overstaging; 10% understaging, 5% not evaluated). Overall accuracy of EUS-R for N stage was 58% (12% overstaging; 3% understaging; 35% not evaluated), with a sensitivity of 64% and a specificity of 60%. In group 1, EUS was useful in order to select those pts (14%) who underwent directly surgery and those (86%) who needed NAT before surgery. In the latter subset, EUS-R changed the therapeutic strategy in 11 cases (15.4%).

Conclusions: Our data shows that EUS is very accurate in the locoregional staging of RC and confirms its role in the preoperative staging of patients with RC. After NAT, EUS-R was less accurate. However, EUS-R had a clinical impact contributing to change the planned surgical therapy in 11 pts.

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PREOPERATIVE COLONOSCOPY AFTER SELF-EXPANDABLE METALLIC STENT PLACEMENT IN PATIENTS WITH ACUTE NEOPLASTIC COLON OBSTRUCTION

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Background and aim: In patients with colorectal cancer a preoperative

colonoscopy is recommended to exclude synchronous lesions. Unfortunately between 7 and 29% of patients with colorectal cancer present as acute colon obstruction, therefore a colonoscopy is not possible. The aim of our study was to evaluate the feasibility of a preoperative colonoscopy after effective stent placement in patients with acute neoplastic obstruction

Material and methods: From January 2002 to September 2004 57 patients with acute neoplastic colon obstruction underwent self-expandable metallic stent (SEMS) placement under fluoroscopic and endoscopic control. Patients who recovered from the acute colon obstruction by an effective stent placement and who had a resectable cancer underwent a standard bowel preparation for the execution of a preoperative colonoscopy under fluoroscopic control with a standard endoscope. We evaluated complications and an endoscopist completed a questionnaire to evaluate the quality of bowel preparation

Results: SEMS were placed with success in 50 of 57 pts (87.8%) (Enteral Wallstent n=23, Ultraflex Precision n=33). 7 pts in whom the SEMS placement (12.2%) was unsuccessful underwent an urgent surgical intervention. 2 pts (4%) required a second stent, due to a long stricture. 19 of the 50 stented pts were not eligible for our study because they had an unresectable cancer. Out of the remaining 31 pts, a complete preoperative colonoscopy was possible in 29 pts (93.4%), an average of 5 days (range 4-8) after insertion of the stent. The average time of the procedure was 11.7 min. Concerning bowel preparation, colon cleansing was excellent in 11 (35.5%), good in 15 (48.4%), fair in 5 (16.1%) of patients. During the endoscopic procedure we found adenomas in 8 pts (25.8%) and a synchronous cancer was detected in 3 pts (9.6%) and it changed the surgical plan for all these 3 pts. The only complication which occurred during the endoscopic procedure was minor bleeding at the stent site.

Conclusions: Our study seems to show that a scheduled second colonoscopy after relief of acute colonic obstruction prior to surgical resection is recommended in patients receiving colonic SEMS for stenosing colorectal cancer

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DETECTION OF ABNORMAL LESIONS RECORDED BY CAPSULE ENDOSCOPY

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Background and aim: Capsule endoscopy (CE) is a novel non-invasive technique with a proven diagnostic yield over push-enteroscopy and radiologic examination of the small bowel. A major drawback is that the evaluation of the video recordings is time-consuming (about 60-120 min). The aim of this study was to assess whether an experienced endoscopy nurse, after an adequate training, might adequately select all significant images without reducing the diagnostic accuracy of the procedure.

Material and methods: Starting from April 2003, a total of 41 consecutive CE studies were blindly reviewed by both an expert endoscopy nurse and an endoscopist. Both the operators were asked to select all significant images and complete a structured questionnaire. Thirty-nine CE studies (2 discharged for premature battery failure) were evaluated. The agreement between operators was calculated by means of Kappa statistics (coefficient of agreement).

Results: The agreement between the two operators was excellent for all kind of selected lesions (mean $k > 0.85$); in particular, the agreement was complete ($k=1$) for site identification, active bleeding, stenosis, and negative studies. The greater disagreement ($k=0.77$) was found in case of minimal mucosal abnormalities (i.e. reduction of villi), which were over-estimated by the nurse.

Conclusions: Our data suggest that an expert endoscopy nurse may accurately select all the abnormal lesion identified by CE. The nurse

pre-view of recordings may increase the cost/effectiveness of the study, by considerably reducing the time need for the analysis by the endoscopist (about 5-10 min), without compromising final diagnosis.

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CAPSULE ENDOSCOPY STUDY OF PORTAL HYPERTENSIVE ENTEROPATHY

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Background and aim: The frequency of small-bowel mucosal changes in patients with portal hypertension is not known. The objective of the study is to better define the mucosal abnormalities of portal hypertensive enteropathy (PHE) and to determine whether these findings are associated with the severity of liver disease, esophageal varices, portal gastropathy, portal colonopathy, or other clinical characteristics.

Material and methods: We compared the medical records of 37 patients with cirrhosis and portal hypertension with 37 control patients who underwent capsule endoscopy over a 3-year period.

Results: Mucosal changes were found to be significantly more common in the cirrhotic patients than in the control patients (67.5% vs. 0, $p < 0.001$). The lesions included telangiectasias or angiodysplastic-like lesions in 9 (24.3%) patients, red spots in 23 (62.2%), and varices in 3 (8.1%). Active bleeding was seen during endoscopic examinations in 4 (10.8%) patients. A comparison of patients with and those without PHE showed that 2+ or larger esophageal varices, portal gastropathy, portal colonopathy, and Child-Pugh class C cirrhosis were all significantly associated with PHE. There were no differences between these two groups of patients with regard to the etiology of cirrhosis, gender, or history of esophageal variceal bleeding.

Conclusions: Mucosal abnormalities in portal jejunoenteropathy include edema, erythema, and vascular lesions findings. A standardized grading system to classify the endoscopic appearance and the severity of portal enteropathy is proposed. The clinical import of these changes remains to be explained.

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LONG-ACTING OCTREOTIDE AS RESCUE THERAPY IN PREVENTING REBLEEDING FROM GASTROINTESTINAL ANGIODYSPLASIAS

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Background and aim: Angiodysplasias are the most common source of obscure gastrointestinal bleeding (GIB) in the elderly. Management of such vascular abnormalities is still an open clinical problem in patients not eligible for surgical or endoscopic therapy. Octreotide has shown to have some benefit in this subgroup of subjects, but it has not been extensively studied.

To investigate the efficacy of long-acting octreotide (LAR-OCT) in the prevention of rebleeding from gastrointestinal angiodysplasias in patients not candidate for surgery and resistant to endoscopic treatment.

Material and methods: Ten patients (M/F 4/6, mean age \pm SD 77.6 \pm 8.1) with a long history of chronic occult or overt GIB due to multiple upper and lower angiodysplasias referred to our unit from 2000 to 2004 entered the study. In each patient diagnosis was made by upper and lower endoscopy, push enteroscopy and wireless video capsule endoscopy, when appropriate. After obtaining written informed consent, LAR-OCT was administered intramuscularly to all patients at a dosage of 10mg monthly for a minimum period of 1 year. Patients were followed up monthly and haemoglobin levels, number of blood transfusions, amount of iron parenteral supplementation, number of hospitalizations one year

before and after starting LAR-OCT therapy were recorded to evaluate the efficacy of the treatment.

Results: Follow-up ranged from 12 to 60 months, median 33. There was a significant difference in haemoglobin values (mean \pm SD 5.8 \pm 1 vs 9.1 \pm 1.6, $p=0.002$), iron parenterally administered (mean \pm SD 26.6 \pm 14 vs 13.3 \pm 10, $p=0.05$), blood units transfused (mean \pm SD 6.6 \pm 2.4 vs 3.1 \pm 3.8, $p=0.01$), number of hospitalizations (mean \pm SD 3.6 \pm 1.2 vs 1.6 \pm 1.5, $p=0.002$) between the year before and after LAR-OCT treatment. Six patients successfully stopped blood transfusions and iron supplementation during the follow up period. In one patient a partial improvement, requiring only iron supplementation, was observed, while no effect was found in the other three. No significant side-effect was registered in any patient.

Conclusions: This is the first non-anecdotal paper reporting on LAR-OCT treatment for preventing rebleeding from gastrointestinal angiodysplasias in patients who cannot undergo surgery due to old age and/or concomitant diseases. Our data demonstrate that chronic administration of octreotide may be useful as rescue therapy in this subgroup of patients.

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TRANSNASAL UPPER GASTROINTESTINAL ENDOSCOPY WITH ULTRATHIN XGIF-N160Y1 OLYMPUS PROTOTYPE: A PILOT STUDY ON ACCURACY AND SAFETY

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Background and aim: Olympus XGIF-N160Y1 video endoscope is an ultrathin (outer diameter: 4.9mm) prototype (PT) with only "up-down" movement, metallic distal tip and a deflexion capability of 210° up and 180° down. Aim of the study was to assess accuracy and tolerability of transnasal gastroscopy (TN) with this PT in a series of dyspeptic patients.

Material and methods: A total of 100 patients (50 men, mean age: 52.03 \pm 16.06 years) previously submitted to transoral gastroscopy (TO) were enrolled in the study. After pre-endoscopy assessment of anxiety (Hamilton A scale), patients underwent TN under continuous monitoring of cardio-respiratory parameters (oxygen saturation, one-lead ECG), while blood pressure was measured in different phases (at baseline, in oesophagus, stomach, and duodenum) and at the end of investigation. Endoscopy accuracy was judged taking into account the possibility to examine oesophagus, entire stomach and duodenum, and to achieve reliable histology of gastric biopsy specimens. Quality of images was also evaluated by operator according to a subjective scale. After TN, patients graded discomfort at insertion and during endoscopy and expressed preference about TN or TO.

Results: Pre-endoscopy anxiety was graded as absent in 25 out of 100 patients (25%), mild in 44, moderate in 25 and requiring a treatment in 6. In all patients TN with prototype allowed to examine oesophagus, entire stomach and duodenum till the second portion, with excellent quality of images, and without complications. Mean duration of endoscopy was 7.35 \pm 2.36 minutes. Reliable histology was possible in 99.4% of biopsy specimens. All patients expressed high level of satisfaction, choosing to repeat TN but one with mild grade of anxiety who preferred TO under conscious sedation. Only one patient, with high score of anxiety, reported mild pain at insertion and during endoscopy. During TN, no significant change in oxygen saturation and blood pressure occurred, whilst heart rate and rate-pressure product increased significantly ($p<0.01$) but returned to baseline at the end of investigation. No ST-T changes or serious arrhythmias occurred.

Conclusions: The present study showed that TN with Olympus XGIF-N160Y1 PT is accurate, safe and well tolerated in almost all patients. Comparative studies with standard endoscopes for TN and TO seem to be useful to confirm the present findings.