successfully removed after ES. As for the remaining 6 patients: four were found to have a bile duct stricture and another two – gallstone pancreatitis. No serious complications as a result of ERC or ES were encountered. We didn’t carry out ERC due to the retained stones after LC over the studying period. Proposed decision tree for the evaluation and treatment of choledocholithiasis in a patient having LC is presented.

Both groups were comparable concerning age, weight and co-morbidity. The mean length of hospital stay was 17 days for LC group vs. 24 days in OC group (p < 0.05). The other significant differences include morbidity (4% vs. 8%, p < 0.05), mean postoperative length of stay (8 vs. 13 days; p < 0.05). All OC group patients required postoperative intramuscular opiates and intravenous fluids, while 16% of LC group did not require any analgesia at all.

This study concludes that combined ES and LC in patients with complicated gallstone disease led to less complications, shorter hospital length of stay, and minimal use of postoperative analgesia. The combination therapy of ES and LC will be recommended for this kind of patients as a minimally invasive procedure.

1604  An Experimental Study on Diathermy Effects on the Bile Ducts


Use of diathermy may be a possible cause of strictures on the common hepatic duct reported after laparoscopic cholecystectomy. In order to further elucidate this problem, we have used a Material and methods: Monopolar diathermy in anesthetized pigs. The diathermy was applied at standardised locations along the cystic duct, in the angle between the cystic duct and the hepatic duct, directly on the bile ducts before and after evacuating bile, and near a clip on the cystic duct. Three to twelve repeated applications of five seconds duration were given at each location. The temperature was measured at standardized locations on the anterior wall of the bile ducts immediately after each application with a T-thermoelement giving the correct temperature within one second. A pilot series of seven pig and a standardised series of six pigs were used.

Results: Diathermy along the cystic duct did not increase the temperature above 5 degrees centigrades, and the mean temperature did not exceed 1.7 degrees in any application series. Diathermy directly on the bile ducts only induced increased temperature at the proximal part of the hepatic duct after application at its distal part (maximum 18 degrees, mean values < 4.5 degrees). Evacuation of bile did not influence temperature change. Diathermy applied directly into the common bile duct induced one event of 11 degrees temperature elevation, otherwise not above 4 degrees. Diathermy applied 0.5 cm away from the clip, induced increase of the temperature up to 11 degrees.

Conclusion: Diathermy applied directly to the bile ducts may induce unexpected and distant increases in the temperature of the duct walls. Application near a clip may increase temperature in the clip. Diathermy applied along the cystic duct revealed no significant increase in the temperature.

1605  Psychiatric Assessment of Patients with Gastrointestinal Distress. Concordance with Psychiatrist' Recommendation

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Clinical problem: Patients with gastrointestinal distress that cannot be explained by somatic investigations, are often referred for psychiatric assessments. Despite this very few studies have addressed to which extent the recommendations given by the psychiatrists are taken into consideration by the treating gastroenterologist.

Material and method: During 1993, all patients with gastrointestinal distress referred to the Department of Psychosomatic Medicine were identified. We compared the recommendation for treatment given by the psychiatrist with the actual treatment recommended by the gastroenterologist.

Results: Preliminary analyses suggest that there is a striking discrepancy between the recommendations given by the psychiatrists and those given by the gastroenterologists following the psychiatric consultation.

Conclusion: The lack of concordance with the recommendations reduces the benefits of psychiatric assessments. The reasons are more related to physicians than patients.

1606  Evaluation of Electroencephalographic Data in Irritable Bowel Syndrome

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There are a lot of unresolved problems concerning diagnostic and treatment of bowels diseases. One of them – relation between irritable bowel syndrome and central nervous system.

The purpose of our investigation was evaluation of functional status of brain in irritable bowel syndrome (IBS) applying electroencephalographic (EEG) data.

We studied 42 patients (6 men and 36 women) with IBS. The diagnosis was made from clinical, endoscopic and histological features. There was no evidence of malignancy and inflammatory processes. Patients mentioned above underwent EEG with functional tests (photostimulation, hyperventilation).

Normal EEG was found in 7 (16.2%) cases – different functional disorders of brain (de-synchronisation and irritable cortex, abnormalities of neurodynamic function). Thus, our results indicate that the majority of patients with IBS has functional disorders of brain.

In conclusion, the treatment of patients with irritable bowel syndrome must be adequate, and functional state of brain should be taken into consideration.

1607  Increased Patients' Anxiety Levels Before Endoscopic Procedures

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Endoscopic procedures are regarded as extremely invasive diagnostic means and it has been reported that subjects undergoing upper gastrointestinal endoscopy develop high anxiety levels. We evaluated whether colonoscopy has a similar stressful effect.

The anxiety status of 364 outpatients undergoing colonoscopy (COL:134 subjects, 20-80 years, 78 males), gastroscopy (G:137, 15-81 yrs, 70 males) and simple consultation (C:91, 23-85 yrs, 51 males) was assessed by means of two self-administered questionnaires (Spielberg 1970) which assign independent scores (min 20 – max 80) to anxiety levels due both to patient personality (Trait) and to transient emotional states (State).

Results. Trait Anxiety was similar in the three groups (COL: 41.3 ± 9.2; G: 42.6 ± 9.4; C: 43.5 ± 9.7) (M ± SD). Being always higher in men than in women (p < 0.001, Student’s test). In women, State Anxiety levels before colonoscopy (49.4 ± 12.2) and gastroscopy (48.8 ± 10.8) were higher than before consultation (45.6 ± 10.3), but in men, a similar significantly milder psychological response was observed in the three situations (COL: 43.4 ± 11.2; G: 42.5 ± 9.8; C: 43.9 ± 8.8) (p < 0.02). No correlation was found between anxiety levels and age. Patients had the same anxiety levels at their first (60) or control gastroscopy, but lower state anxiety was observed at follow-up colonoscopies.

Conclusions. Patients undergoing endoscopic procedures, both gastroscopy and colonoscopy, develop a status of anxiety, particularly high in women. The memory of gastroscopy seems more unpleasant than that of colonoscopy. Adequate patient instruction and psychological assistance could be helpful in preparing patients for endoscopy.

1608  Psychoemotional Deviations and Dyspepsia

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In the present research we have studied rural residents by a specially compiled questionnaire to detect gastrointestinal complaints. At the same time special attention has been paid to the following aspects: sleeping disorders, headache, general anxiety, longterm stress-situations in the past, contentment with family life, received treatment for neurosis in the past.

We have questioned 1316 rural residents; 500 of them had dyspeptic complaints. All these patients were investigated by endoscopy, ultrasonography e.t.c.

Analysing the results, appears, that the group of patients with dyspeptic complaints had more frequently psychoemotional deviations.

42.1% of dyspeptic persons (DP) and 26.9% non-dyspeptic persons (NDP) had long-term stress-situations in the past; 37.9% of DP and 22.0% of NDP had sleeping disorders; 60.9% of DP and 37.7 of NDP had headache; 32.5% of DP and 14.3% of NDP had general anxiety – the differences were significant (p < 0.01).

There were no significant differences in contentment with family life and in previous treatment for neurosis.

It is evident, that gastroenterologists should pay more attention to psychoemotional deviations in rural residents with dyspeptic complaints, consulting the psychotherapist if necessary.
1609 Globus Sensation – An Indicator of Oesophageal Motor Dysfunction

<table>
<thead>
<tr>
<th>Stricture</th>
<th>Sclerotherapy sessions per pt</th>
<th>Sclerostent amount per session</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 9</td>
<td>30</td>
<td>681</td>
</tr>
<tr>
<td>N = 82</td>
<td>429</td>
<td>6198</td>
</tr>
</tbody>
</table>

Six pts undergone one and 3 pts 2-5 dilatations with Savary-Gilliard dilators, up to 15 mm, during a follow up of 6-12 months without any complication. We conclude that approximately 10% of pts develop post-sclerotherapy esophageal strictures which can be managed effectively and safely with Savary-Gilliard dilators. The amount of sclerostent given per session but not the total amount of sclerostent seems to be a risk factor for developing post-sclerotherapy esophageal strictures.

1612 Patients with Diffuse Esophageal Spasm Show an Abnormal Esphago-Cardiac Inhibitory Reflex

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The esophagus may be involved in the genesis of some cardiac arrhythmias, spontaneous (i.e. "swallow syncope") or induced by structural manipulations, including esophageal balloon dilatation used to reproduce angina-like chest pain. To investigate the mechanisms of these esophago-cardiac reflexes, we recorded in 8 normal subjects (N) and 10 patients with diffuse esophageal spasm (DES), the ECG during an esophageal manometric examination and measured the time difference of RR intervals induced by dry swallowing, swallowing of solid boluses (bread) and intragastric balloon inflation at 100 mmHg for 10 sec. The percent variation of the RR interval of ECG from its mean basal value to its highest or lowest value observed after stimulation was calculated in both groups.

Results (N, mean ± SD):

<table>
<thead>
<tr>
<th>Group</th>
<th>Dry swallowing</th>
<th>Solid swallowing</th>
<th>Intragastroballoon inflation or dilation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES</td>
<td>−15 ± 15#</td>
<td>−9 ± 6#</td>
<td>+16 ± 9#</td>
</tr>
<tr>
<td></td>
<td>−14 ± 10#</td>
<td>−5 ± 2#</td>
<td>+29 ± 8#</td>
</tr>
</tbody>
</table>

* p < 0.05 versus the corresponding value of group N; # p < 0.05 versus basal period; *bhiphaseic response.

Comment: (1) Dry swallows induced a brief increase in heart rate, (2) solid swallows induced an increase in heart rate followed by a decrease, significantly more marked in DES group, (3) balloon inflation induced a decrease in heart rate significantly more intense in DES group, while balloon deflation was followed by a significant increase in heart rate in group N.

In conclusion, the esophageal wall distension, either due to solid bolus or balloon inflation, elicits an inhibitory esophago-cardiac reflex that is more intense in patients with DES and might induce cardiac arrhythmias in predisposed subjects.

1613 Endosonography Can Detect Residual Tumour Infiltration After Medical Treatment of Inoperable Oesophageal Cancer

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The assessment of response to medical treatment of oesophageal carcinoma is based on data provided by endoscopy, histopathology, and computed tomography (CT). The aim of our study was to assess the usefulness of endosonography (EUS) in the surveillance of these patients.

Patients and methods: 28 patients with inoperable oesophageal cancer, treated by combined chemotherapy, radiation therapy and endoscopic therapy, were considered after treatment in endoscopic and histologic remission. EUS was performed with an Olympus EU-M3 echo endoscope (7.5 and 12 MHz). EUS findings were staged according to the new TNM classification in all patients, computed tomography was carried out. Subsequently, EUS and CT examinations were performed every 2 or 3 months, in order to appreciate the response to treatment or relapse. EUS was systematically carried out when the endoscopic lesions had disappeared, and when biopsies were negative.

Results: The initial evaluation of the 28 patients who were apparently tumour free after combined medical treatment showed: stage I: 2 cases; stage II A: 8 cases; stage II B: 14 cases; stage IV: 3 cases. After therapy, when biopsies were negative, the staging evaluated by EUS was the following: T0N0: 14 cases; T1N1: 2 cases; T2N1: 3 cases; T3N1: 4 cases; T4N0: 1 case; T4N1: 1 case. CT did not show any parietal thickening or lymph node involvement in 3 patients with tumours staged T3N1 and in 2 patients with tumour staged T2N1 by EUS. When no infiltration was detected by EUS, no tumoral evolution was observed within at least eight months (median 14 months; extr-