

dl, $p < 0.05$). Retinol binding protein level was also significantly lower in complication group (2.7 vs 3.7 mg/dl, $p < 0.01$). However, there was no significant difference in serum albumin, choline esterase, total cholesterol and total lymphocyte count between two groups. There was also no significant difference in anthropometry such as BMI, triceps skin fold thickness and arm muscle circumference. Although the preoperative daily dosage of prednisolone just before surgery was compared, no difference was observed between two groups. And no relationship was observed between the route of preoperative nutritional support (oral intake or total parenteral nutrition) and septic complications. Conclusions: It is suggested that preoperative measurement of rapid turnover protein level such as prealbumin and retinol binding protein is useful in predicting the risk of postoperative septic complications.

T1704

Cytokine Network in Rectal Mucosa in Perianal Crohn's Disease: Relations with Inflammatory Parameters and Need for Surgery

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Background: Nowadays anti-TNF- α antibodies are often used for the therapy of perianal Crohn's disease. Nevertheless this treatment is effective only in a part of these patients and recent studies suggested an important role for other cytokines, such as IL-6, IL-1 β , IL-12 and TGF- β 1 in chronic bowel inflammation. Aim: The aim of this study was to assess the cytokine profile in the rectal mucosa of patients affected by perianal Crohn's diseases and to understand its relations with the systemic cytokine profile, the systemic inflammatory parameters and the need for surgery. Patients and methods: Seventeen patients affected by perianal Crohn's disease, 7 affected by Crohn's disease without perianal involvement and 17 healthy controls were enrolled in this study and underwent blood sampling and endoscopy. During endoscopy two rectal mucosal samples were taken and expression of TNF- α , IL-6, IL-1 β , IL-12 e TGF- β 1 was quantified with ELISA. Local cytokine levels were then compared and correlated to diagnosis, therapy, phenotype (fistulizing and stenosing) and disease activity parameters. Results: In the group with perianal Crohn's disease rectal mucosal IL-1 β , IL-6 and serum IL-6 and TNF- α were higher than in patients with small bowel Crohn's disease and healthy controls. IL-12 and TGF- β 1 mucosal levels did not show any differences among the three groups. Mucosal IL-6 significantly correlated with PDAI and mucosal TNF- α and IL-1 β . Mucosal TNF- α and IL-1 β showed a direct correlation with the histological grade of disease activity. Conclusions: The cytokines network analysis in perianal CD shows the important involvement of IL-1 β , IL-6 and TNF- α produced by macrophage and dendritic cells. These results seem to suggest that IL-6 and IL-1 β might be alternative targets of an immunomodulatory therapy in case of anti-TNF- α failure.

T1705

Abdominal Surgery Impact Scale (ASIS) Is Responsive in Assessing Outcome Following IPAA

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Purpose: Various generic and disease specific quality of life instruments are available to assess outcome following surgery. However, they are not sensitive to assess outcome in the early postoperative period, which is important when assessing changes in postoperative care. Thus the aim of this study was to evaluate the responsiveness of the Abdominal Surgery Impact Scale (ASIS) in assessing quality of life in a cohort of patients undergoing ileal pouch-anal anastomosis (IPAA). Methods: All patients over the age of 18 undergoing IPAA between March 2005 and October 2007 completed the ASIS on postoperative day 2 or 3 and at time of discharge. The ASIS consists of 6 domains and 18 items with scores ranging from 18 to 126. In addition, demographic, clinical and surgical data was collected including gender, age, steroids, laparoscopic assisted versus conventional surgery, ileostomy diversion, anastomotic leaks and small bowel obstructions. Length of stay data was also analyzed. Internal reliability of the ASIS was measured using Cronbach's alpha coefficients. Results: 92 patients (36 female, 56 male, mean age=36.83+/-10.79) completed the ASIS at the 2 time intervals (mean 3 days and mean 7 days postoperatively). 47 patients had an IPAA performed with an ileostomy; 11 patients had IPAA performed laparoscopically. The mean hospital stay was 10.78 days. The overall mean ASIS score significantly increased over time (mean 56.93+/-18.3 vs. 81.83+/-17.27, $p < 0.001$). Patients who had an ileostomy had a significantly lower mean score at discharge (77.32 vs. 86.82), secondary to lower scores on the physical limitations, functional impairment and visceral function domains. Seven patients (7.6%) had ileo-anal anastomotic leaks and seven patients (7.6%) had small bowel obstructions. Both leaks and bowel obstructions resulted in increased length of stay. Laparoscopic patients had a significantly lower length of stay (8.8 days vs. 11.1 days). Cronbach's alpha coefficient was 0.94 overall and ranged from 0.69 to 0.91 for subscales indicating internal reliability. Conclusions: ASIS is a reliable instrument for measure quality of life in the postoperative period and is responsive to changes over time. Although quality of life increases postoperatively during hospital stay, at discharge, patients with IPAA still have decreased quality of life. Patients with ileostomies have further decreased scores.

T1706

Morbidity and Mortality Associated with Emergency Abdominal Surgery in the Elderly

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Background: Over 35 million Americans are at least 65 years old. This population is projected to double in the coming decades and as a result, the number of elderly (age ≥ 70) who present to the hospital requiring emergency surgery is rising. Emergency surgery is associated with increased morbidity and mortality, and is further magnified among the elderly. The aim of this study was to determine the mortality rates of elderly patients who underwent emergency laparotomy, and to define the variables associated with increased risk of morbidity

and mortality, which can be used for quality improvement and informed surgical decision making in the preoperative setting. Methods: A retrospective cohort study of patients age ≥ 70 that required emergency abdominal surgery by the Colorectal Surgery Department at a tertiary care center from 1994 to 2004 was conducted. Outcome variables included age, ASA classification, albumin level, diagnosis, co-morbid conditions and APACHE II score. The endpoints of in hospital mortality, length of hospitalization and one-year mortality were examined. Results: Eighty-eight patients met inclusion criteria for analysis (55F, 33M). The average patient age was 79 years. Initial diagnoses included bowel obstruction, perforated diverticulitis, perforated cancer, ischemic colon and appendicitis. The primary procedures performed included resection with primary anastomosis, Hartman resection, diverting colostomy/ileostomy, appendectomy or lysis of adhesions. There was a 20% in hospital mortality. The 1-year mortality rate was 38%. Univariate analyses were performed on outcome variables. Increased ASA class ($p < 0.001$), length of stay in the SICU ($p < 0.001$), advanced age ($p < 0.011$) and decreased albumin level ($p < 0.007$) were associated with statistically significant increased mortality. There was no statistical difference in mortality based on etiology of abdominal emergency, APACHE II score or co-morbid conditions. However, patients presenting with perforated diverticulitis had an increased hospitalization compared with all other patients (21v.14 days, $p < 0.03$). Conclusions: Emergency abdominal surgery in the elderly is associated with high 30-day morbidity and mortality. This cohort found an appreciable 1-year mortality (38%). Additionally, this study demonstrated that increased mortality was associated with increased ASA class, advanced age and decreased albumin level. The results of this study illustrate the factors which can augment the preoperative evaluation of elderly patients who present with abdominal emergencies, as well as provide data which can be used to enhance informed decision making between the surgeon and patient.

T1707

Is There a Critical Number of Recovered Nodes in ypT3-4 Rectal Cancer After Neoadjuvant CRT in Order to Provide Proper Final Disease Staging?

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Background: Decreased number of recovered nodes is a poor prognostic factor in rectal cancer and may reflect quality of surgery and inadequate sampling of nodes leading to significant understaging of patients. Neoadjuvant CRT seems to contribute to a decrease in the number of recovered nodes after radical surgery and therefore, the least number of nodes required to minimize underestimation of disease staging is undetermined. The purpose of this study was to determine the influence of the total number of nodes recovered on the risk of finding node metastases for advanced rectal cancer following neoadjuvant CRT. Methods: Patients with non-metastatic distal rectal cancer who underwent neoadjuvant CRT (50.4Gy and 5FU/Leucovorin) followed by radical surgery (TME) were eligible for the study. All patients with ypT3-4 rectal cancer managed by neoadjuvant CRT and radical surgery were retrospectively reviewed in order to determine a correlation between the number of recovered nodes and the risk of lymph node metastases and the critical number nodes associated with significant underestimation of nodal spread and disease staging. Results: 435 patients with distal rectal cancer managed by neoadjuvant CRT were included in the study. Overall, 165 patients had ypT3-4 rectal cancer after radical surgery and TME. The median number of recovered nodes was 9 nodes/patient. Patients with > 9 nodes/specimen were at increased risk for N+ disease (47% vs 27%; $p = 0.01$). Less than 6 nodes/specimen was associated with significant decreased risk of finding node metastases ($p = 0.006$: Sensitivity 82% and Specificity 39%). Conclusions: A minimum of 6 nodes/specimen is required to provide proper nodal staging in ypT3-4 rectal cancer after neoadjuvant CRT and radical surgery. Less than 6 lymph nodes/specimen in patients with ypT3-4 rectal cancer managed by neoadjuvant CRT and TME should be considered at increased risk for disease stage underestimation.

T1708

Is Initial Pre-Treatment Staging for Distal Rectal Cancer Undergoing Neoadjuvant CRT Useful?

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Background: One of the benefits from neoadjuvant CRT for distal rectal cancer is tumor downstaging determined by radiation necrosis. It is still controversial if final disease stage, recurrence or survival is dependent on initial (radiological) staging. Methods: Patients with non-metastatic distal rectal cancer who underwent neoadjuvant CRT (50.4Gy and 5FU/Leucovorin) followed by radical surgery (TME) and available initial disease staging were eligible for the study. All patients with distal rectal cancer managed by neoadjuvant CRT were staged according to estimation of TNM parameters based on spiral CT scans or endorectal ultrasound. Results: Overall, 331 patients had available information on initial radiological staging and were included in the study. There were 39 patients with stage I (12%), 198 with stage II (60%) and 94 patients with stage III disease (28%). There was no correlation between initial disease stage and final pathological ypT status ($p = 0.5$), final tumor size ($p = 0.06$), ypN status ($p = 0.7$), overall recurrences ($p = 0.8$) or final disease stage ($p = 0.2$). 5-year overall and disease-free survival were similar for radiological stage I, stage II and stage III disease ($p = 0.4$ and $p = 0.9$ respectively). Post-CRT staging was significantly associated with development of recurrent disease ($p < 0.001$) and with overall and disease-free survival ($p < 0.001$). Conclusions: Even though Initial radiological staging is crucial for patient selection there is no influence in final disease staging, recurrence or survival.