

COVERING THE COVER

Does *Helicobacter pylori* infection influence the major postoperative complication rate after sleeve gastrectomy?

A retrospective cohort study in an endemic region

No promising data exists on the role of *Helicobacter pylori* infection on the outcomes of sleeve gastrectomy. In this single-center, retrospective study in Turkey comprising 460 patients, whether the presence of *H. pylori* changes the early outcome of sleeve gastrectomy was investigated. Of note, 71% of the patients were female, with a mean age of 37.5 years and body mass index of 42.7 kg/m². Approximately one-third of the study population showed *H. pylori* in the biopsy specimens. There was no association between early surgical complication rates and the presence of *H. pylori*. *H. pylori* screening does not seem to be feasible and is not recommended based on the findings of this study. See page 379.

Does the number of mucosal immune cells differ in irritable bowel syndrome and its subtypes?

In addition to impaired bowel motility and visceral sensitivity, low-grade inflammation of the intestinal mucosa is a proposed mechanism for the pathogenesis of irritable bowel syndrome (IBS). The alterations in the immune cell populations and mediators may be helpful to understand the role of mucosal inflammation in IBS. Regarding the controversial results of the studies on the role of mucosal cellular infiltration in the pathogenesis of IBS, the study by Iliaz et al compared the immune cell infiltration in rectal and ileal biopsy specimens of non-post-infectious patients with IBS with that in healthy controls. A total of 52 subjects [36 patients with IBS (15 diarrhea-predominant and 21 constipation-predominant) and 16 healthy controls who had similar age and gender characteristics] were included. Serotonin positivity; intraepithelial lymphocyte (IEL) count; and CD4+, CD8+, CD20+, and CD3+ cell counts were assessed by immunohistochemistry. CD3+ and CD4+ cell counts in the rectal and terminal ileum biopsies were lower in the IBS group than in the healthy controls, whereas serotonin positivity, IEL count, and CD20+ and CD8+ cell counts were similar between the two groups. The number of IELs was higher in the rectal biopsies of diarrhea-predominant patients with IBS. In this small study examining the role of inflammation at

the mucosal level, the authors found lower immune cell counts in patients with IBS and proposed that mucosal immune dysregulation may be responsible for the pathogenesis of IBS. See page 384.

Detection and clinical significance of DNA repair gene ERCC8 tag SNPs in gastric cancer

In this study reported from China, the role of excision repair cross-complementing group 8 (*ERCC8*) tag single nucleotide polymorphism (SNP) in gastric cancer is assessed among 120 patients with gastric cancer and 120 healthy subjects. *ERCC8* rs158572 and rs158916 genotypes were similar in both groups, whereas *ERCC8* rs158572 GA/GG and rs158916 TT genotypes showed approximately 8-fold increased risk of cancer compared with AA and CT/CC genotypes. Gastric cancer involves multifactorial etiologies, and the evaluation of confounding factors and the validation of these results in other ethnic populations will provide greater knowledge regarding the role of *ERCC8* genotypes in gastric cancer. See page 392.

Real-world survival data of a rare malignancy: Anal cancer results in HIV-negative patients from Turkey

Anal cancer is a rare neoplasia, which presents at a late stage because of the delay in the referral of patients. Surgery plays a limited role, and most of the patients receive chemoradiotherapy. This retrospective cohort study reported the characteristics and outcomes during a 20-year follow-up period in 28 HIV-negative patients who received standard 5-fluorouracil+mitomycin combination chemoradiotherapy. The 3- and 5-year progression-free survival rates were 92.4% and 63%, respectively. During a median 54-month follow-up, 3- and 5-year overall survival rates were 82% and 71%, respectively. The results of this real-life study from a tertiary center suggest a good prognosis in patients with HIV-negative anal squamous cell cancer. See page 411.

Diagnostic value of combined serum biomarkers for the evaluation of liver fibrosis in chronic hepatitis C infection: A multicenter, noninterventional, observational study

In this multicenter study examining the diagnostic accuracy of serum biomarkers for liver fibrosis in

chronic hepatitis C infection, the performance of several biomarkers [FibroTest®, aspartate amino-transferase-to-platelet ratio index (APRI), aspartate aminotransferase and alanine aminotransferase ratio (AAR), fibrosis index based on four factors (FIB-4), age-platelet (AP) index, and Forns index], as well as the various combinations of these serum biomarkers (FibroTest+APRI, FibroTest+APRI+FIB-4, FibroTest+-FIB-4, FibroTest+AP index, FibroTest+Forns index, FibroTest+AAR, APRI+FIB-4, APRI+AP index, APRI+AAR, APRI+Forns index, FIB-4+AP index, FIB-4+AAR, FIB-4+Forns index, AP index+AAR, AP index+Forns index, and AAR+Forns index), was compared with METAVIR fibrosis stages obtained from liver biopsies. The authors analyzed 182 patients with a mean age of 50 years, of whom 60% were female. Almost two-thirds of the patients had F0–F1 fibrosis, whereas the remaining had significant/advanced fibrosis. A positive correlation was demonstrated between the FibroTest, APRI, FIB-4, AP index, and Forns index and the METAVIR fibrosis scores. Compared with previous studies, the diagnostic performance of the noninvasive tests was lower in this cohort, which may be attributed to the small number of patients with advanced fibrosis and cirrhosis. The combination of FIB-4 and APRI was more successful in determining advanced fibrosis and cirrhosis. See page 464.

Clinical outcomes of colorectal endoscopic submucosal dissection and risk factors associated with piecemeal resection

This single-center, retrospective study examined the outcomes of colorectal endoscopic submucosal dissection (ESD) and the risk factors associated with piecemeal resection and reported the results of 756 lesions in 740 patients between 2005 and 2014. The en bloc resection rate was 85.7%, and median follow-up period was 15.4 months in the en bloc ESD group and 13.7 months in the piecemeal ESD group. Overall curative resection and histologic complete resection rates were 69.7% and 77.0%, respectively. Histologic complete resection and curative resection rates were higher in the en bloc ESD group than in the piecemeal

ESD group. Only hybrid ESD, submucosal fibrosis, and procedure time ≥ 60 min were independently associated with piecemeal ESD. Furthermore, the recurrence rate was significantly higher in the piecemeal ESD group than in the en bloc ESD group (5.6% vs. 0.7%; $p=0.008$). Univariate analysis showed that piecemeal ESD, tumor size ≥ 35 mm, histologically incomplete resection, and procedures performed by medium-volume endoscopists were the risk factors for recurrence after ESD. The authors noted that larger lesion size, histologic incomplete resection, and ESD performed by medium-volume endoscopists were associated with the risk of recurrence, based on univariate analysis. Because the authors assessed only seven cases of recurrence, a further multivariate analysis was not performed. The recurrence rate was 0.7% for 1-piece resection, 2.3% for 2-piece resection, and 10.7% for ≥ 3 -piece resection. Hybrid ESD technique and submucosal fibrosis were independent risk factors for the piecemeal resection of large colorectal epithelial neoplasia. Because of the high risk of recurrence, a close follow-up is recommended for patients who undergo piecemeal ESD. See page 473.

Endoscopic small-capacity forceps increase the pathological diagnosis of gastric indefinite neoplasia

The quality of endoscopic forceps biopsy specimens has a substantial role in obtaining diagnostic information of gastrointestinal endoscopy. This study from Japan investigated the association of the forcep size with the frequency of gastric indefinite neoplasia (GIN). In patients who underwent biopsy with small biopsy forceps (SmF), an increased frequency of GIN diagnosis was observed compared with patients who underwent biopsy with standard biopsy forceps. The number of atypical cells in the pathological specimens did not differ in both groups. However, the pathological assessment of small-size lesions by the SmF may be the reason for the increased GIN frequency. In patients diagnosed with GIN, the authors recommend performing the follow-up biopsy with an equal or larger-size biopsy forceps and limiting the use of SmFs in small-caliber endoscopes. See page 481.