IN BRIEF

UPPER GASTROINTESTINAL TRACT

A national study of *Helicobacter pylori* infection in gastric biopsy specimens

Sonnenberg, A. et al. Gastroenterology 139, 1894-1901 (2010)

US investigators who analyzed gastric biopsy samples from 78,985 individuals observed similar epidemiological profiles for Helicobacter pylori infection, chronic active gastritis and intestinal metaplasia. These three related disorders occurred more frequently in men, were strongly associated with each other and showed an inverse relationship with Barrett metaplasia.

IBS

Differential expression of Toll-like receptors in patients with irritable bowel syndrome

Brint, E. K. et al. Am. J. Gastroenterol. doi:10.1038/ajg.2010.438

Quantitative analysis of Toll-like receptor (TLR) expression in colonic biopsy specimens showed higher levels of TLR4 and TLR5 in patients with IBS (n=26)than in controls (n=19). By contrast, TLR7 and TLR8 levels showed the opposite pattern. The authors conclude that an immune interaction, one involving the innate immune response, occurs between the gut microbiota and the host during pathogenesis of IBS.

PANCREATIC CANCER

Elevated transcript levels from the MDM2 P1 promoter and low p53 transcript levels are associated with poor prognosis in human pancreatic ductal adenocarcinoma Grochola, L. F. et al. Pancreas doi:10.1097/MPA.0b013e3181f95104

E3 ubiquitin-protein ligase Mdm2 is the principal negative regulator of the tumor-suppressor p53. Transcription from the MDM2 gene is mediated by two differentially regulated promoters, P1 and P2. New findings indicate that increased transcription from P1 (but not P2) is linked to a ≤6.3-fold increase in the relative risk of cancer-related mortality in patients with pancreatic ductal adenocarcinoma. In addition, reduced levels of p53 messenger RNA correlated with particularly poor prognosis.

LIVER TRANSPLANTATION

Use of tissue plasminogen activator in liver transplantation from donation after cardiac death donors Hashimoto, K. et al. Am. J. Transplant. 10, 2665-2672 (2010)

Ischemic-type biliary stricture occurs in ≤50% of patients transplanted with livers donated after cardiac death. Treatment of the grafts with tissue plasminogen activator (TPA) before implantation may reduce this risk: only two of 22 TPA-treated graft recipients developed ischemic-type biliary stricture. Excessive blood loss occurred in 14 recipients; however, the TPA dose was similar for individuals who experienced excessive bleeding and those who did not.

RESEARCH HIGHLIGHTS