GASTRO-HEP News

By Stacey Small

Colectomy for Ulcerative Colitis: Postoperative Complications and Mortality

In order to determine the occurrence and severity of postoperative complications following colectomy and to identify factors that affect patient outcomes, de Silva and coworkers performed a population-based study in which they analyzed data from 666 patients with ulcerative colitis (UC) who underwent a colectomy from 1996 to 2009. The study was published in the November issue of *Clinical Gastroenterology and Hepatology*. After using International Classification of Diseases (9th/10th revisions) codes to identify these 666 patients, medical charts were reviewed to determine factors that influenced outcomes.

A postoperative complication occurred in 27% of UC patients who underwent a colectomy, and the mortality rate was 1.5%. The risk of complications was greatest among patients older than 64 years (>64 years vs 18–34 years: odds ratio [OR], 1.95; 95% confidence interval [CI], 1.07–3.54) and among patients with multiple comorbidities (>2 vs 0: OR, 1.89; 95% CI, 1.06–3.37). Further, patients who underwent emergent surgery because they did not respond to in-hospital medical management or who developed an acute complication had worse outcomes (2.4% mortality) than patients who had elective surgeries (emergent vs elective colectomy: OR, 1.62; 95% CI, 1.14–2.30). Patients who received immunosuppressants or other drugs for inflammatory bowel disease (mesalamine, corticosteroids, azathioprine, 6-mercaptopurine, or infliximab [Remicade, Janssen]) did not have an increased risk for postoperative complications, including infections.

Role of the Appendix in Recurrent *Clostridium difficile* Infection

In a study published in the December issue of *Clinical Gastroenterology and Hepatology*, Im and associates investigated the possible relationship between the presence of an appendix and the risk of recurrent infection by *Clostridium difficile*. Data were collected from 254 patients who were admitted to the hospital for *C. difficile* infection between 2005 and 2007. Abdominal computed tomography reports and records of patients' surgical histories were obtained in order to determine whether patients had an appendix. The primary outcome measure in this study was recurrence of *C. difficile* infection, defined as recurrent diarrhea with a positive *C. difficile* stool toxin assay in a patient with prior *C. difficile* infection within the past 8 weeks. Using a multivariate analysis that considered 11 clinical variables, the investigators found that patients who had an appendix were at much lower risk for recurrence of *C. difficile* infection than those without an appendix ($P<.0001$; adjusted relative risk, 0.398). Conversely, patients older than 60 years had an increased risk of *C. difficile* infection recurrence ($P=.03$; adjusted relative risk, 2.44). The researchers concluded that the presence of an appendix has a significant and independent inverse association with recurrence of *C. difficile* infection, but these findings should be validated by prospective, controlled, multicenter trials.

Use of Fecal Assays to Identify Food Hypersensitivity in Patients with IBS

Carroccio and colleagues assessed the frequency of food hypersensitivity in 160 patients with irritable bowel syndrome (IBS), 40 patients with other gastrointestinal diseases, and 50 healthy individuals. At the beginning of the study, fecal samples were assayed for tryptase, eosinophil cationic protein (ECP), and calprotectin; specific immunoglobulin E levels were measured; and study participants completed a symptom severity questionnaire. Study participants were observed for 4 weeks, after which they were placed on an elimination diet for 4 weeks; this diet was free of cow's milk and derivatives, wheat, egg, tomato, and chocolate. Participants who reported improvements in symptoms following the elimination diet were diagnosed with food hypersensitivity, based on the results of a double-blind, placebo-controlled, oral food challenge (with cow's milk proteins and then wheat proteins).

Seventy of the IBS patients (44%) showed an improvement in symptoms with the elimination diet, and 40 (25%) were found to have specific hypersensitivities to cow's milk or wheat, based on testing. Other foods that caused IBS-like symptoms included egg (18 cases), tomato (14 cases), soy (5 cases), yeast (6 cases), pork (3 cases), prawn (4 cases), fish (5 cases), celery (3 cases), olives (2 cases), nuts (3 cases), carrots (2 cases), and meat (3 cases). Patients with IBS and food hypersensitivity had significantly higher levels of fecal ECP and tryptase than patients without food hypersensitivity; the ECP assay showed 65% sensitivity and 91% specificity for diagnosis of food hypersensitivity. This study, which was published in the November issue of *Clinical Gastroenterology and Hepatology*, suggests that ECP assays could help to diagnose food hypersensitivity in patients with IBS.