GASTRO-HEP News

By Stacey Small

Gluten Intolerance in Patients without Celiac Disease

In a double-blind, randomized, placebo-controlled, dietary rechallenge trial, Biesiekierski and colleagues sought to determine whether gluten consumption can cause gastrointestinal symptoms in subjects without celiac disease. Patients with irritable bowel syndrome who tested negative for celiac disease and were symptomatically controlled on a gluten-free diet participated in this study, which was published in the March issue of the *American Journal of Gastroenterology*. Patients consumed 2 slices of bread and 1 muffin daily, in addition to their gluten-free diet, for up to 6 weeks. These items were gluten-free for the placebo group. A visual analog scale was used to evaluate symptoms, and the researchers monitored markers of intestinal inflammation, injury, and immune activation. A total of 34 patients aged 29–59 years completed the study (19 patients in the gluten group and 15 patients in the control group). Human leukocyte antigen (HLA)-DQ2 and/or HLA-DQ8 was present in 56% of all enrolled patients. Thirteen patients in the gluten group and 6 patients in the control group reported poorly controlled symptoms during the study (68% vs 40%, respectively; *P*=.0001). The visual analog scale showed that patients in the gluten group were significantly worse within 1 week in terms of overall symptoms (*P*=.047), pain (*P*=.016), bloating (*P*=.031), satisfaction with stool consistency (*P*=.024), and tiredness (*P*=.001). No significant changes in the levels of fecal lactoferrin, celiac antibodies, or highly sensitive C-reactive protein, or measures of intestinal permeability were observed in either group. Responses to gluten consumption were similar among those with or without HLA-DQ2/HLA-DQ8. Although the study failed to identify a mechanism for nonceliac gluten intolerance, it provides evidence for the existence of this condition.

Reflux Bile Acid Composition and the Development of Barrett Esophagus

Results from a prospective study that assessed the effects of bile acid composition on Barrett esophagus were reported in the advanced issue of *Digestive and Liver Disease* published online on April 6, 2011. A total of 150 patients were enrolled in this study; 50 patients had Barrett esophagus and 100 patients did not. Gastric juice was collected from all patients using an endoscopic procedure, and 6 types of bile acids were analyzed. The ratio of hydrophobic to hydrophilic bile acids (bile hydrophobicity ratio [BHR]) was then calculated, and the relationship between this ratio and clinicopathologic factors of Barrett esophagus was studied. Takahashi and coworkers found that patients with Barrett esophagus had a significantly higher mean BHR compared to patients without Barrett esophagus (0.26±0.05 vs 0.08±0.02; *P*<.05). A multivariate analysis revealed that a high BHR was a predictor for Barrett esophagus. BHR also correlated with both COX-2 protein expression and accelerated cellular proliferation in patients with Barrett esophagus.

Colonic Stenting Versus Emergency Surgery in Patients with Acute Malignant Colonic Obstruction

Results from a multicenter, randomized trial involving patients with acute, obstructive, left-sided colorectal cancer were published in the April issue of *The Lancet Oncology*. This study, which was led by van Hooft and associates, sought to establish whether patients with acute, malignant, colonic obstruction achieved better health outcomes with colonic stenting or emergency surgery. Between March 9, 2007 and August 27, 2009, 98 patients were randomized to receive either colonic stenting (n=47) or emergency surgery (n=51). The primary endpoint was mean global health status at the 6-month follow-up visit. The final analysis showed a mean global health status of 63 (standard deviation 23.8) in the colonic stenting group and 61.4 (standard deviation 21.9) in the emergency surgery group; after adjustment for baseline values, this difference was not significant. In addition, no differences were observed between groups for 30-day mortality, overall mortality, morbidity, or stoma rates at the latest follow-up visit. The stoma rate directly after intervention was increased in the emergency surgery group, but this group had a reduced occurrence of stoma-related problems. The most common serious adverse events among the colonic stenting and emergency surgery groups were abscess (3 patients vs 4 patients, respectively), perforations (6 patients vs 0 patients, respectively), and anastomotic leakage (5 patients vs 1 patient, respectively). Pneumonia (3 patients vs 1 patient, respectively) and wound infection (1 patient vs 3 patients, respectively) were the most common adverse events. The researchers concluded that there was no decisive clinical advantage to colonic stenting over emergency surgery.