By Dee Rapposelli

New ASGE Guidelines for Premalignant Esophageal Disease Surveillance

The American Society for Gastrointestinal Endoscopy (ASGE) released new guidelines for endoscopy use in the early recognition and surveillance of premalignant esophageal diseases. Published in the December issue of *Gastrointestinal Endoscopy*, guidelines for the following conditions were included:

- Barrett esophagus without dysplasia: Endoscopic surveillance is not required. If surveillance is performed, endoscopy should be conducted with 4-quadrant biopsies at 2-cm intervals at a 3- to 5-year interval. A 1-year follow-up after the initial diagnosis is not recommended.
- Barrett esophagus with low-grade dysplasia: The diagnosis should be confirmed by an expert pathologist, and endoscopy should be repeated in 6 months to confirm the diagnosis and then performed annually with 4-quadrant biopsies at 1- to 2-cm intervals. Endoscopic resection or ablation should be considered as an alternative.
- Barrett esophagus with high-grade dysplasia: The diagnosis should be confirmed by an expert pathologist, and endoscopic surveillance should be performed at 3-month intervals with 4-quadrant biopsies at 1-cm intervals. Endoscopic resection and radiofrequency ablation (preceded by endoscopic resection in the case of focal nodular or ulcerated changes), endoscopic ultrasound for local staging, and surgical consultation should be considered.
- Achalasia (confirmed): Endoscopic surveillance is not recommended.
- Upper aerodigestive cancer: Endoscopic surveillance is not recommended.
- Tylosis: Endoscopic surveillance should begin in individuals at 30 years of age or at the onset of disease. Endoscopy should be repeated at 1- to 3-year intervals.
- Caustic injury: Endoscopic surveillance should begin 10–20 years after the injury at 2- to 3-year intervals.

Gastrointestinal Pathogen Panel Receives FDA Clearance

The xTAG Gastrointestinal Pathogen Panel (GPP; Luminex, Inc.), a test that can simultaneously detect 7 common bacterial, 2 viral, and 2 parasitic causes of infectious gastroenteritis in a single patient sample, recently received clearance from the US Food and Drug Administration (FDA). Bacteria that can be identified include *Campylobacter, Clostridium difficile* (toxin A/B), *Escherichia coli* O157, enterotoxigenic *E. coli* (heat labile and heat stable), *Salmonella, Shigella,* and Shiga-like toxin-producing *E. coli* (stx 1/stx 2). Viruses that can be identified include norovirus and rotavirus A, and parasites include *Cryptosporidium* and *Giardia.*

The xTAG GPP test was evaluated by collecting samples from 1,407 patients with suspected infectious gastroenteritis and comparing the results against those of individual tests that are commonly used to detect the 11 bacteria, viruses, or parasites previously mentioned. Tests were also conducted in 203 samples from patients with previously confirmed infectious gastroenteritis and in 313 additional specimens from pediatric patients with suspected infectious gastroenteritis. Results with the xTAG GPP test were comparable to those of the individual tests. However, due to the risk of false-positives, all positive results from the xTAG GPP test need to be confirmed by additional testing.

Vaccinating Children Against Rotavirus Protects Unvaccinated Adults

Pediatric rotavirus vaccination appears to protect unvaccinated adults from infection, according to findings published online ahead of print publication in the January issue of *Clinical Infectious Diseases.* A dramatic decline in the incidence of rotavirus infection in the United States was observed in both vaccinated and unvaccinated children only 2 years after the implementation of the pediatric rotavirus vaccination. Evan J. Anderson, MD, currently Assistant Professor at Emory University in Chicago, and a team of researchers from Northwestern Memorial and Children's Memorial Hospitals in Chicago studied whether the protection provided by vaccination within the pediatric population extends to the adult population. The research team compared the prevalence of rotavirus in 3,530 bacterial stool cultures from adults collected during the late winter/spring of 2012 (February to May) with the prevalence recorded during the prepediatric vaccine era (2006–2007) and the pediatric vaccine era (2008–2010). A relative decline in incidence of 48% was found. Immunocompromise remained a noted risk factor for infection in adults, with about 30% of infected adults being immunocompromised in the current study.

The investigators concluded that pediatric rotavirus vaccination protects adults from rotavirus and, if rotavirus vaccination continues to be promoted, will translate into significant cost savings in healthcare expenditures, considering that the total annual adult inpatient hospital charges related to rotavirus have been estimated at $152 million.

Advances in Therapeutics at the 10th Annual Gastrointestinal Cancers Symposium

The 10th Annual Gastrointestinal Cancers Symposium, which took place January 24–26, 2013, in San Francisco, California, included the following findings:

• Adjuvant chemotherapy with oral fluoropyrimidine S-1 (a combination of tegafur, gimeracil, and oteracil) improved survival at a rate superior to that of standard gemcitabine in Asian patients with pancreatic cancer, according to an interim analysis from a phase III trial. A total of 378 Japanese patients with stage I–III pancreatic cancer were randomly selected to receive either adjuvant chemotherapy with S-1 or gemcitabine. At the first interim analysis, the risk of death was 44% lower in the S-1 arm than the gemcitabine arm (hazard ratio [HR], 0.56; 95% confidence interval [CI], 0.42–0.74; *P*<.0001). The 2-year overall survival rate was 70% versus 53%, respectively.

Toxicities in patients receiving S-1 were manageable, with more than 70% of patients completing treatment. The rates of grade 3/4 leukopenia, thrombocytopenia, and anemia as well as elevated aspartate aminotransferase levels were higher in patients receiving gemcitabine than those receiving S-1, whereas rates of fatigue and anorexia were higher in patients receiving S-1 than those receiving gemcitabine.

S-1 is approved for the treatment of stomach, colorectal, pancreatic, biliary, head and neck, non–small cell lung, and metastatic breast cancer in Japan but is considered to be in clinical development in the United States. The survival benefit in people of white European ancestry is yet to be determined. Treatment-related gastrointestinal toxicities have been more severe in white persons than in Asians receiving the drug, explained the principal investigator of the study, Katsuhiko Uesaka, MD, PhD, Medical Deputy Director at Shizuoka Cancer Center Hospital in Shizuoka Prefecture, Japan. Metabolic differences between the populations are thought to be the cause, and it is conjectured that lower doses of S-1, which might affect the drug's efficacy, might be required in patients of white European descent.

• Surgical removal of residual tumors following imatinib therapy was shown to provide a greater survival benefit than imatinib therapy alone in patients with recurrent and metastatic gastrointestinal stromal tumors (87.7 months vs 42.8 months; *P*=.001), according to a research team from Ulsan College of Medicine in Seoul, South Korea.

Patients who received surgical treatment of residual tumors after imatinib therapy had significantly better progression-free survival (PFS; HR, 2.33; 95% CI, 1.03–5.24; *P*=.04) and overall survival (OS; HR, 5.46; 95% CI, 1.46–20.41; *P*=.01) than those treated with imatinib alone. This translates into a 5.5-fold lower risk of death and a nearly 4-year longer time to disease progression.

Findings were extracted from a retrospective study of 134 patients with metastatic or recurrent gastrointestinal stromal tumors who showed at least 6 months of disease stabilization or response to imatinib therapy. Forty-two of these patients received surgery at a median of 19.1 months after imatinib therapy; the remaining 92 patients continued imatinib therapy. Participants were followed for a median of 58.9 months.

In addition to surgical intervention, PFS was associated with the female sex, KIT exon 11 mutation, and low tumor burden. OS was associated with low tumor burden.

• Findings of a phase III study of docetaxel as second-line therapy in treatment-resistant advanced esophagogastric cancer showed that patients receiving docetaxel after failing first-line treatment lived an average of 50% longer than patients receiving active symptom control in the form of radiotherapy, corticosteroid therapy, and/or supportive medications. Although docetaxel is commonly used as second-line therapy, this is the first study to definitively show that the strategy provides a survival benefit.

The trial, conducted by a research team led by Hugo Ford, MD, Director of Cancer Services at Addenbrooke's Hospital in Cambridge, United Kingdom, included 168 patients with locally advanced or metastatic esophagogastric adenocarcinoma that had progressed within 6 months of initial chemotherapy. Patients were randomly assigned to receive either docetaxel or active symptom control. The median OS was 5.2 months for patients receiving docetaxel and 3.6 months for those receiving active symptom control.

In Brief

A genetic marker associated with impaired clearance of hepatitis C virus was identified upstream of interferon lambda 3 on chromosome 19q13.13. This gene, termed interferon lambda L4, was found to contain a variant called deltaG that predicts how a patient may respond to treatment. The presence of the variant is more common in persons of African descent than those of European descent and may, in part, explain why African Americans have a poorer response to treatment than other population groups. *Nat Genet.* 2013 Jan 6. Epub ahead of print.

According to a prospective multicenter study, resection was incomplete in 10.1% of 346 neoplastic polyps that were identified in 269 of 1,427 patients who underwent colonoscopy. The rate of incomplete resection was higher for large (10–20 mm) than small (5–9 mm) neoplastic polyps (17.3% vs 6.8%; relative risk [RR], 2.1) and sessile serrated adenomas/polyps than conventional adenomas (31.0% vs 7.2%; RR, 3.7). *Gastroenterology.* 2013;144:74-80.e1.