

Quadruple Therapy Versus Standard Therapy for Eradication of *Helicobacter pylori*

In an industry-sponsored, open-label, randomized, phase III trial, Malfertheiner and colleagues studied the efficacy and safety of a new, 4-drug regimen versus standard therapy for the treatment of *Helicobacter pylori* infection in adults. Results from this 39-site European trial were published in the March issue of *The Lancet*. Patients were randomly assigned to either 10 days of quadruple therapy (omeprazole plus a 3-in-1 capsule containing bismuth subcitrate potassium, metronidazole, and tetracycline) or 7 days of standard therapy (omeprazole, amoxicillin, and clarithromycin). The primary outcome was elimination of *H. pylori* infection, defined as negative urea breath tests at least 28 and 56 days after completion of treatment. Assessment for noninferiority occurred in the per-protocol population (n=339), and subsequent assessment for superiority was performed in the intent-to-treat (ITT) population (n=440). In the ITT analysis, quadruple therapy achieved an eradication rate of 80% (174 of 218 patients), compared to an eradication rate of 55% (123 of 222 patients) with standard therapy ($P<.0001$). Treatment failures in patients who received standard therapy were found to be associated with clarithromycin resistance ($P<.0001$); eradication was achieved in only 8% of patients with resistance versus 85% of those who had no resistance. Gastrointestinal and central nervous system disorders were the main adverse events in both groups. Based on these results, the investigators advised that clinicians consider quadruple therapy as a first-line treatment for *H. pylori* infection, as this regimen provides greater eradication rates than standard therapy without the risk of clarithromycin resistance.

New Medical Position Statement on Treatment of Barrett Esophagus

According to a new position statement published in the March issue of *Gastroenterology*, the American Gastroenterological Association (AGA) now recommends that precancerous cells be endoscopically removed in patients with confirmed, high-risk Barrett esophagus. Specifically, endoscopic eradication via radiofrequency ablation, photodynamic therapy, or endoscopic mucosal resection is recommended in patients with confirmed high-grade dysplasia; endoscopic eradication should also be discussed with patients who have low-grade dysplasia. Currently, endoscopic eradication therapy is not recommended for

patients with Barrett esophagus without abnormal cells. If eradication therapy is not indicated, is unavailable, or is declined by the patient, then surveillance by endoscopy is recommended; the AGA recommends surveillance every 3 months in patients with high-grade dysplasia, every 6–12 months in patients with low-grade dysplasia, and every 3–5 years in patients with no dysplasia. Endoscopic eradication therapy is effective for the majority of patients (70–80%) with high-grade dysplasia. As an alternative, patients can be treated via esophagectomy, though analysis of current treatment outcomes suggests that patients achieve lower morbidity rates with ablative therapy.

New Instrument Can Facilitate Hepatocellular Carcinoma Surveillance in Patients With Chronic Liver Disease

Hepatocellular carcinoma (HCC) surveillance requires accurate testing of biomarkers in order to identify patients at risk of developing cancer. To aid clinicians in this task, the uTASWako i30 instrument (Wako Diagnostics) now offers in vitro diagnostic testing of alpha-fetoprotein L3 (AFP-L3) and des-gamma-carboxy prothrombin (DCP). This instrument, which recently received 510(k) clearance from the US Food and Drug Administration, utilizes microfluidics to integrate sampling, mixing, separation, and detection; it can measure up to 6 analytes per patient sample, and the first result is delivered in 9 minutes. This instrument is suitable for hospital and reference laboratories as well as tertiary care centers.

In Brief

According to a population-based study of 49,799 patients with inflammatory bowel disease (IBD) and a group of 477,504 healthy individuals, the risk for venous thromboembolism (VTE), including deep venous thrombosis (DVT) and pulmonary embolism (PE), increases 2-fold in IBD patients. A significant observation of this study was that the relative risks for VTE, DVT, and PE among IBD patients were highest in the youngest age group (≤ 20 years). However, the absolute risk remained low in this group. Prophylactic anticoagulation should be considered in hospitalized patients with IBD, at least in older patients for whom the absolute risk is higher.