Higher Levels of Hepatitis C Virus RNA Observed Among Men and African Americans

A study published in the July issue of *Hepatology* identified several factors that are associated with higher levels of hepatitis C virus (HCV) RNA. For this study, Uccellini and coauthors analyzed data from 1,701 HCVinfected injection drug users who were recruited in San Francisco between 1998 and 2000 as part of the Urban Health Study. In addition to analyzing demographic factors, HCV genotype, and interleukin (IL)-28B genotype (in a subset of patients), the researchers also tested study participants for co-infection with HIV-1 and/or hepatitis B virus (HBV). The mean age of the study participants was 46 years, the median duration of injection drug use was 26 years, approximately 75% of study participants were male, and 56% of subjects were African American. The median HCV RNA level was 6.45 log₁₀ copies/mL. An unadjusted analysis of the data revealed that HCV RNA levels were higher among patients who were older, male, African American, co-infected with HBV and/or HIV-1, and/or had IL-28B genotype CC. HCV RNA levels were also higher among individuals infected with HCV genotype 1 compared to those infected with HCV genotype 3 or 4. In an adjusted analysis, several factors remained independently associated with HCV RNA levels, including age, gender, race, HIV-1 co-infection status, HCV genotype, and *IL-28B* genotype.

Low Risk of Lymph Node Metastases in Patients with Barrett Esophagus and High-Grade Dysplasia or Intramucosal Carcinoma

While mucosal resection is often effective for the treatment of mucosal neoplasms associated with Barrett esophagus, this therapy cannot detect lymph node metastases. Thus, some surgeons prefer esophagectomy for the treatment of Barrett esophagus with high-grade dysplasia or intramucosal carcinoma, as esophagectomy does allow for identification of lymph node metastases. To help clinicians determine whether the benefits of esophagectomy outweigh its risks in this setting, a systematic review of the relevant literature was performed, the results of which were published in the June issue of the *American Journal of Gastroenterology*. From 70 relevant reports, Dunbar and Spechler identified 1,874 patients with high-grade dysplasia or intramucosal carcinoma who had undergone esophagectomy. Of the 1,350 patients with a diagnosis of intramucosal carcinoma, 26 were found to have lymph node metastases (1.93%; 95% confidence interval [CI], 1.19–2.66). None of the 524 patients with high-grade dysplasia had lymph node metastases. Given that the mortality risk associated with esophagectomy often exceeds 2%, the study authors concluded that the risk of lymph node dysplasia alone does not justify the preference for

Concomitant Quadruple Therapy Is Effective for Eradication of Helicobacter pylori

esophagectomy over endoscopic therapy.

Because of growing resistance to antimicrobial agents, eradication of *Helicobacter pylori* infection typically requires the use of multiple antibiotics. However, increasing the complexity and/or duration of therapy can reduce patient adherence to the treatment regimen. To see whether a shorter regimen could be effective, Federico and colleagues compared a 5-day concomitant therapy regimen with a 10-day sequential therapy regimen. Results of this study were published in the July issue of Gastroenterology. Patients assigned to the concomitant therapy regimen (n=90) received 4 medications for 5 days: esomeprazole (40 mg twice daily), amoxicillin (1 g twice daily), levofloxacin (500 mg twice daily), and tinidazole (500 mg twice daily). Patients assigned to the 10-day, sequential therapy regimen (n=90) received esomeprazole (40 mg twice daily) and amoxicillin (1 g twice daily) for 5 days followed by an additional 5 days of therapy comprised of esomeprazole (40 mg twice daily), levofloxacin (500 mg twice daily), and tinidazole (500 mg twice daily). In the intent-to-treat analysis, the *H. pylori* eradication rates were similar for both treatment regimens: 92.2% for concomitant therapy (95% CI, 84.0-95.8) versus 93.3% for sequential therapy (95% CI, 86.9-97.3). In the per-protocol analysis, eradication rates were 96.5% (95% CI, 91-99) and 95.5% (95% CI, 89.6-98.5) for concomitant and sequential therapy, respectively. Given that both regimens appear to be effective, clinicians may want to take into consideration the relative costs of the 2 regimens. According to Federico and colleagues, concomitant therapy costs \$9 less than sequential therapy; due to the large number of patients who require therapy for H. pylori infection, this small difference could add up to significant savings for public health systems.