

Personalizing Patient Care



One are the days of one-size-fits-all treatment. Personalized medicine, increasingly being referred to as precision medicine, is becoming the goal of management. According to the National Institutes of Health, precision medicine is an emerging approach for treating and preventing disease that considers the variability in each individual person in terms of genes, environment, and lifestyle. In the February 26, 2015 issue of *The New England Journal of Medicine*, Drs Francis S. Collins and Harold Varmus noted that “the prospect of applying this concept broadly has been dramatically improved by the recent development of large-scale biologic databases (such as the human genome sequence), powerful methods for characterizing patients (such as proteomics, metabolomics, genomics, diverse cellular assays, and even mobile health technology), and computational tools for analyzing large sets of data.” Much research is being conducted in this area, particularly in inflammatory bowel disease (IBD).

In this month's issue of *Gastroenterology & Hepatology*, Drs Michael J. Kingsley and Maria T. Abreu examine the use of personalized medicine in IBD. The authors discuss the current strategies for optimizing therapies according to drug levels and risk factors for an aggressive disease course. They note that future personalized medical decisions may include the use of serologic, genetic, and microbial data to better predict outcomes for individual Crohn's disease and ulcerative colitis patients and to precisely tailor therapy.

In our other feature article, Drs Robert J. Wong and Robert G. Gish highlight the importance of being aware of the many extrahepatic manifestations associated with chronic hepatitis C virus (HCV), especially those affecting other organs. As the authors note, there has been much research on the impact of chronic HCV infection on liver-related complications and outcomes. However, many of the extrahepatic sequelae and complications resulting from the systemic effects of persistent HCV infection have been studied less. In this article, the authors examine the associations between chronic HCV infection and insulin resistance, cardiovascular diseases, nonalcoholic fatty liver disease, and metabolic diseases.

Our hepatology coverage continues with an interview with Dr Stephen A. Harrison on the management

of lysosomal acid lipase deficiency in the Advances in Hepatology column. This condition presents much in the same way as nonalcoholic fatty liver disease, which is currently an epidemic in the adult US population. Dr Harrison provides an overview of lysosomal acid lipase deficiency, including when patients should be tested for the condition and what treatment entails.

In the Advances in GERD column, Dr Brian E. Lacy discusses the effects of opioids on esophageal dysfunction. Opioids are becoming a common treatment choice for chronic pain. Dr Lacy outlines the adverse effects of opioid use involving the gastrointestinal tract and esophagus and explains how opioid use affects gastroesophageal reflux disease and Barrett esophagus.

The Advances in Endoscopy column focuses on sedation in colonoscopy. Dr Amnon Sonnenberg examines the advantages and disadvantages associated with various sedatives, including their adverse events, and discusses a recent study that he and his colleagues conducted on practice patterns of sedation. He outlines trends for specific sedatives over the study period and offers his thoughts on the future use of sedative agents.

In the Advances in IBD column, Dr David Binion examines *Clostridium difficile* infection in patients with IBD. Dr Binion discusses which IBD patients are at greatest risk of acquiring *C difficile* infection, the impact of *C difficile* infection on IBD, and how to manage patients with both of these conditions.

In our brief case study section, Drs Dharmesh Kaswala, Ari Chodos, and Sushil Ahlawat present an adult patient with Henoch-Schonlein purpura with gastrointestinal involvement.

I hope that you enjoy this issue, and hope to see you at this year's Digestive Disease Week in San Diego, California.

Sincerely,

A handwritten signature in black ink that reads "Gary R. Lichtenstein". The signature is fluid and cursive, with the first name being the most prominent.

Gary R. Lichtenstein, MD, AGAF, FACP, FACC