Selected Reviews in Surgical and Molecular Pathology

From the Tutorial on Pathology of the GI Tract, Pancreas, and Liver at Weill Cornell Medical College

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The following 8 review articles are derived from lectures presented at the Tutorial on Pathology of the GI Tract, Pancreas, and Liver, which took place November 15 to 19, 2010, at the Westin Diplomat Resort and Spa in Hollywood, Florida. The tutorial was conducted under the direction of Rhonda K. Yantiss, MD, and the sponsorship of the Department of Pathology and Laboratory Medicine at Weill Cornell Medical College, New York, New York.

Weill Cornell Medical College designated this educational activity for a maximum of 34.75 American Medical Association Physicians Recognition Award category 1 continuing medical education credits. It was also approved by the American Board of Pathology as a Self-Assessment Module for part II of the Maintenance of Certification Program, for which it provides a maximum of 20 self-assessment module credits. The tutorial is designed to update physicians on advances in our understanding of gastrointestinal diseases, address problems faced during evaluation of tissue samples, and provide pathologists with a framework for interpreting both histologic patterns of disease and results of molecular analyses. Review articles representing a subset of topics discussed at the tutorial are presented in this issue of the Archives of Pathology & Laboratory Medicine. We hope that their publication will bring these materials to a broader audience.

A wide array of topics was presented at the 5-day tutorial. Elizabeth Montgomery, MD, discussed Barrett esophagus and related neoplasia, as well as contemporary cancer staging issues encountered in tumors of the upper gastrointestinal tract. Major points from that presentation are summarized in a review coauthored by Dora Lam-Himlin, MD, and Lysandra Voltaggio, MD. Rhonda Yantiss, MD, presented new information regarding staging and classification of appendiceal neoplasms. Highlights from the discussion regarding mucinous neoplasms are compiled in a manuscript coauthored by Nicole Panarelli, MD.

Ancillary testing is increasingly important in the evaluation of colorectal adenocarcinoma. Pathologists are routinely asked to perform and interpret immunohistochemical studies and educate our clinical colleagues regarding the significance of test results. Wade Samowitz, MD, delved into these topics in detail in a series of tutorial presentations, which are summarized in 2 reviews. The first is coauthored by Katherine Geiersbach, MD, and discusses evaluation of colorectal carcinomas for mismatch repair deficiency, including interpretation of immunohistochemical stains for DNA mismatch repair proteins and microsatellite instability testing. The second article was written in collaboration with Allie Grossmann, MD, PhD. It focuses on key molecular events that affect the epidermal growth factor receptor signaling pathway and are potential targets for directed medical therapies.

Nonepithelial polyps and tumors frequently occur in the gastrointestinal tract and recognizing and classifying them pose a variety of diagnostic challenges, particularly when present in limited, endoscopically obtained, mucosal biopsy material. Jerome Burke, MD, provides us with a practical guide to the morphologic evaluation of biopsy samples that contain atypical lymphoid infiltrates, emphasizing features that distinguish lymphoid hyperplasia from low-grade lymphomas of mucosa-associated lymphoid tissue type. Issues related to the diagnosis, risk stratification, and molecular evaluation of gastrointestinal stromal tumors were discussed by Brian Rubin, MD, PhD, at the tutorial. These topics are summarized in a review coauthored by Deepa Patil, MD. In addition, tutorial attendees were entertained by Henry Appelman, MD, who expounded upon the differential diagnosis of endoscopically apparent mesenchymal lesions of the gastrointestinal tract. His approach to these lesions is condensed into a synopsis coauthored by Ahren Rittershaus, MD.

Finally, many pathologists find the evaluation of liver biopsies a daunting exercise, particularly when faced with samples that show features of chronic hepatitis. Neil Theise, MD, provided tutorial attendees with a pragmatic approach to the classification of chronic hepatitis, including key points that allow the formulation of an appropriate differential diagnosis. Rachel Hudacko, MD, and Dr Theise distilled this presentation into a review that supplies the reader with readily applicable grading and staging criteria for assessment of liver biopsies from patients with chronic hepatitis.

The Tutorial on Pathology of the GI Tract, Pancreas, and Liver is a comprehensive annual course that takes place in the month of November. It features a panel of internationally recognized faculty members who are committed to providing attendees with high-quality, up-to-date information. The next tutorial will take place on November 14 to 18, 2011, at the Westin Diplomat Resort and Spa.
in Hollywood, Florida. It will feature key figures in gastrointestinal and surgical pathology, including Henry Appelman, MD; Jerome S. Burke, MD; Joel K. Greeno, MD; John Hart, MD; David S. Klimstra, MD; Laura W. Lamps, MD; David Lewin, MD; Elizabeth Montgomery, MD; Brian Rubin, MD, PhD; Wade S. Samowitz, MD; and Neil D. Theise, MD, and will be directed by Dr Rhonda K. Yantiss. Further information regarding the tutorial can be obtained from the tutorial link on the following Web site: www.cornellpathology.org.

Dr Rhonda K. Yantiss received her medical degree from Harvard University School of Medicine and completed her residency training in anatomic pathology at the Massachusetts General Hospital, followed by a fellowship in gastrointestinal pathology at Beth Israel Deaconess Medical Center, in Boston, Massachusetts. She is an associate professor of pathology and laboratory medicine at Weill Cornell Medical College where she is also the director of the Gastrointestinal Pathology Service. Dr Yantiss has authored more than 60 peer-reviewed articles as well as several book chapters. She currently serves as chair of the Education Committee for the Rodger C. Haggitt Gastrointestinal Pathology Society and as an editorial board member of several major surgical pathology journals. Dr Yantiss is also an associate editor in gastrointestinal pathology for the Archives of Pathology & Laboratory Medicine.