Endoscopic Ultrasonography, Second Edition  
Editors: Frank G. Gress MD and Thomas Savides MD  
Publisher: Wiley-Blackwell  
ISBN: 978-1-4051-5722-3; $79.96

In the three decades since its development, endoscopic ultrasound has become an essential tool in both diagnostic and therapeutic endoscopy with an ever-increasing variety of applications in the clinical setting. Though previously available only in tertiary referral centers, this technology has become increasingly utilized in community-based practices. As such, there is a growing need for physicians with training and expertise in endoscopic ultrasonography. Unfortunately, there is a paucity of instructional and reference materials for practitioners who perform endosonography. The second edition Endoscopic Ultrasonography edited by Gress and Savides provides a wealth of information and practical advice for those interested in endoscopic ultrasonography. This text can be utilized by the experienced endosonographer, fellow in training, or general gastroenterology practitioner wishing to refresh and expand his or her skills and knowledge in endoscopic ultrasonography.

The format of Endoscopic Ultrasonography is arranged in 22 chapters of which the majority of chapters focus on specific GI disorders and organ systems. Each chapter is written by one or more international experts in the field of endoscopic ultrasound. The text begins with an interesting chapter relating the historical beginnings of echoendoscopy and its early development.

Chapter 2 reviews the physics and technical aspects of ultrasound specifically applied to the GI tract. This chapter includes multiple images and diagrams that make understanding the concepts of ultrasound imaging easy to understand. Detailed description of the gastrointestinal wall ultrasonographic image and its corresponding histologic structure is particularly informative. Chapter 3 focuses on the echoendoscope, specifically the instruments and equipment, and provides practical advice on setting up an endoscopic ultrasound suite. Two tables list details on available echoendoscopes which would be especially helpful for those who are considering purchasing new equipment.

Chapters on normal radial and linear anatomy are written in an easy to understand format. This chapter combines straightforward descriptions with images and diagrams that aide in conceptualizing normal anatomy, which is the primary hurdle for beginning echoendoscopists. Technical aspects and practical advice on performing fine needle aspiration, specimen preparation, and interpretation are explained in the subsequent chapters.

The remaining chapters focus on specific gastroenterologic disorders evaluated by endoscopic ultrasound. Each chapter contains concise, up-to-date information with detailed references for evidence-based recommendations. Both basic and advanced techniques are reviewed for each topic. The authors provide practical tips on technique and tricks of the trade used in their own practice which may be especially useful for the reader. The last chapter highlights the future of endoscopic ultrasonography, including technological advances in equipment and therapeutic applications.

Endoscopic Ultrasonography is an authoritative textbook for practitioners of echoendoscopy. Readers will find a well-written practical guide to improve their skills and knowledge in endoscopic ultrasound. The text may be used as reference, thorough refresher course, or training guide to those beginning their study of echoendoscopy.

Andrew C. Bolin, M.D.  
Fellow  
Division of Gastroenterology  
Scott & White Memorial Hospital & Clinics  
Texas A&M Health Science Center  
Temple, Texas

James T. Sing, D.O.  
Assistant Professor of Medicine  
Division of Gastroenterology  
Scott & White Memorial Hospital & Clinics  
Texas A&M Health Science Center  
Temple, Texas

Curbside Consultation in IBD  
Editors: David Rubin, Sonia Friedman, Francis Farraye  
SLACK Inc., 2009  
ISBN: 978-1-55642-856-2; $79.95

This new book on inflammatory bowel diseases (IBD), called Curbside Consultation in IBD, consists of 49 short...
BOOK REVIEWS

chapters, each of which asks one question (or sometimes a few) on a wide variety of IBD topics. Some questions are broad (How do you treat pouchitis?) and some are quite specific (Should I measure TPMT before starting azathioprine?) In each chapter, the answers are provided in 2–4 pages by an international panoply of IBD experts. This is an up-to-date IBD text that does not shy away from controversies in the field. By the end, nearly all the hot topics in IBD are addressed, including concomitant immunomodulators and biologics, pregnancy in IBD, chromoendoscopy for surveillance, DALMs, use of serology testing, etc. The text is often further strengthened by handy tables, endoscopic images, and treatment algorithms, in addition to short lists of key references. Overall, I was impressed with the breadth of the subjects covered and the high quality of the discussions.

There is some room for improvement. Several chapters contain a short summary paragraph or table that allows the reader to get a quick answer to the clinical question, rather than having to delve into the prose. In keeping with the curbside theme, I would have liked to see a summary of this kind in every chapter. Although most of the chapters are academic in tone and evidence-based, there are plenty of opinions presented that rely on clinical or anecdotal experience. This is to be expected in a text about IBD, and as a result, there is sure to be debate regarding some of the opinions expressed. For example, I would question the recommendations regarding C. difficile testing in IBD and the use of the Quantiferon test for detecting latent TB infection. A couple of the chapters are not as practical as the others. For example, I do not see a need for an entire chapter devoted to HPV in women on azathioprine which is an issue that is still evolving and whose significance is unclear.

Aside from these quibbles, the majority of the book hits the mark, offering straight-forward, real-world advice that will greatly enhance the care of IBD patients. Bigger than pocket-sized but light enough for easy transport, this book is not to be read cover to cover. I suspect that most readers will look in the index first then proceed to the chapter relevant to their question. It is intended for practicing gastroenterologists, GI trainees, and surgeons looking for quick answers to questions likely to arise in the routine care of IBD patients. To this end, the editors have succeeded admirably. There is something here for everyone and even full-time “IBDologists” can stand to learn a lot from using this book.

Christian D. Stone, M.D., M.P.H.
Co-Director, Inflammatory Bowel Disease Program
Associate Professor of Medicine
Division of Gastroenterology
Washington University School of Medicine
St. Louis, Missouri

John Pohl, M.D., Book Editor, is on the Editorial Board of Practical Gastroenterology.

FROM THE PEDIATRIC GASTROENTEROLOGY LITERATURE

Gastric Acid Inhibition Use in Pediatric Cystic Fibrosis

Medications that promote gastric acid inhibition (GAI), such as H2-antagonist or proton pump inhibitor therapy, are often added to the medical regimen of patients with cystic fibrosis (CF) and pancreatic insufficiency to help improve the efficacy of pancreatic enzyme replacement therapy (PERT). However, prior studies have demonstrated that GAI in other patient populations may increase the risk of pulmonary infections, and the authors of this study evaluated if long-term GAI affected lung function as well as bacterial colonization in pediatric CF patients.

A retrospective cohort study of pediatric CF patients from a large university hospital in the Netherlands divided a study population into 3 groups as follows: patients receiving GAI to help with PERT, patients receiving GAI for documented gastroesophageal reflux (GERD), and patients not receiving GAI. These patients

WWW.PRACTICALGASTRO.COM
were analyzed for basic demographics, CFTR genotype, lower airway culture results, history of meconium ileus at birth, history of distal intestinal obstruction syndrome, liver cirrhosis, results of recent pulmonary function tests, and body mass index.

In total, 228 patients were evaluated of which 35% were receiving GAI for PERT, 5% were receiving GAI for GERD, and 56% were not receiving GAI. Patients receiving GAI for PERT were significantly younger and had a higher rate of severe CFTR mutations. These patients also trended toward a higher prevalence of liver cirrhosis although this finding was not significant. Patients receiving GAI for GERD also were significantly younger and had a higher prevalence of meconium ileus.

The percentage of patients infected with Staphylococcus aureus and Pseudomonas aeruginosa as found in airway cultures was not different between the 3 groups although CF patients receiving GAI for GERD demonstrated a significantly earlier age of initial infection with these bacteria compared to the other CF patients. Finally, pulmonary function tests demonstrated no significant change at 10 years of age between patients receiving GAI for PERT and the control group. However, CF patients receiving GAI for GERD did show significantly decreased pulmonary function tests compared to control patients at 10 years of age.

This study demonstrated that GAI for PERT does not worsen pulmonary function. There appears to be an association of GAI treatment for GERD with a decline in pulmonary function, but it is unclear if the consequences of GERD, and not GAI, caused these findings. The authors suggest that evaluation for GERD should be initiated earlier in pediatric CF patients to prevent a decline in lung function. (Van der Doef H, Arets H, Froeling S, Westers P, Houwen R. “Gastric acid inhibition for fat malabsorption or gastroesophageal reflux disease in cystic fibrosis: longitudinal effect on bacterial colonization and pulmonary function.” The Journal of Pediatrics 2009; 155: 629-633).

**Tricyclic Antidepressant Use in Children with IBS**

Functional gastrointestinal disorders (FGIDs) in children include such entities as irritable bowel syndrome, functional abdominal pain, and functional dyspepsia. Minimal research is available regarding pharmacologic treatment of these disorders. This study prospectively followed children from 6 tertiary children’s hospitals across the United States. Patients with a diagnosis of FGID based on Rome II criteria were enrolled in a one-week symptom evaluation utilizing the Likert pain scale. Children with a qualifying Likert score subsequently were randomized to receive either low-dose amitriptyline or placebo for a 4-week time period. Several psychological questionnaires for age-appropriate symptom self reporting were utilized.

In total, 83 patients completed the study. The mean age of the study subjects was 12.7 years (range 8–17 years), and approximately 78% of the patients were girls. A significant improvement in both treatment groups was noted throughout the study when evaluating the psychological parameters of depression, coping, disability, and somatization. However, there was no significant difference in improvement between the two treatment groups, which included a multivariate analysis of gender, age, initial diagnosis, and FGID type. In total, a significant decrease in pain in both groups occurred during the study compared to initial enrollment.

This study demonstrates that amitriptyline, as well as placebo, are associated with short-term improvement in FGID-associated abdominal pain. This study did not evaluate long-term treatment efficacy or the effect of higher amitriptyline dosing. The placebo effect seen in this study underscores the importance of the patient-physician-family relationship in children with FGID. (Saps M, Youssef N, Miranda A, Nurko S, Hyman P, Cocjin J, Di Lorenzo C. “Multicenter, randomized, placebo-controlled trial of amitriptyline in children with functional gastrointestinal disorders.” Gastroenterology. 2009; 137: 1261-1269).
IMMCO Diagnostics Inc. Announces the Launch of New ImmuLisa™ Celiac G+ and tTG Antibody Assays

More Sensitive, More Accurate Detection of Celiac Disease

IMMCO Diagnostics is pleased to announce the introduction of ImmuLisa™ Celiac G+ antibody assays and ImmuLisa™ anti-human Tissue Transglutaminase (tTG) for the detection of antibodies in patients with Celiac disease. The new Celiac G+ and tTG antibody assays enable more accurate identification of symptomatic and asymptomatic Celiac disease, thus helping diagnose patients and potentially avoid serious effects of the disorder. With the addition of these ELISA assays, IMMCO offers a complete line of autoimmune diagnostic tests for Celiac disease.

Celiac disease affects approximately 1% of the population, yet delays of up to 13 years for proper diagnosis may lead to serious complications such as splenic atrophy and intestinal lymphoma. Celiac disease is characterized by malabsorption of gluten containing grains such as wheat, barley and rye. Classical symptoms include diarrhea, weight loss and malnutrition. It is not uncommon for the initial symptoms to be non-gastrointestinal or for gastrointestinal symptoms, if present, to be mild or intermittent. Some common non-gastrointestinal manifestation include short stature, iron and folate deficiency, anemia, bone loss, aphthous stomatitis, arthralgia, and dental enamel defects. The need to examine a wider range of clinical presentation has led to greater number of individuals diagnosed with Celiac disease later in life than ever before.

The ImmuLisa™ Celiac G+ antibody assays incorporate deamidated gliadin peptide as the antigen for the detection of IgA and IgG antibodies to gliadin. The clinical sensitivity of IMMCO’s Celiac G+ and Celiac tTG is superior to other immunoassays as shown in the charts below.

“The performance of ImmuLisa™ Celiac G+ IgA/IgG and ImmuLisa™ tTG IgA/IgG antibody assays are superior in both their sensitivity and specificity in comparison with other commercially available gliadin peptide or tTG immunoassays,” said William Maggio, President and CEO of IMMCO Diagnostics. “We are very pleased to add these new products to IMMCO’s growing autoimmune disease diagnostic portfolio. It further supports our strong commitment to the rapidly developing area of autoimmune testing services and in-vitro diagnostic products. Whether you are looking for a top notch reference lab to perform these tests or are looking to buy these superior test kits to conduct in your own lab, IMMCO is ready to partner with you to provide accurate, reliable cutting edge diagnostics.”

About IMMCO Diagnostics: IMMCO Diagnostics Inc. is a leading autoimmune disease diagnostics company. IMMCO Diagnostics incorporates pioneering research, clinical laboratory expertise, and novel medical devices into an innovative approach to autoimmune diagnostics. Supported by the strength of our research and innovation, our company offers high quality diagnostic services and products worldwide. For more information about IMMCO Diagnostics, please visit our web site at http://www.immco.com.

(continued on page 62)
Xifaxan® 550 mg Tablets Demonstrate Significant Reduction of Risk for Episodes of Overt Hepatic Encephalopathy According to Findings Published in The New England Journal of Medicine

Salix Pharmaceuticals, Ltd. announced the publication of results from the Company’s pivotal Phase 3 efficacy and safety study of XIFAXAN® (rifaximin) 550 mg tablets in The New England Journal of Medicine. The study showed XIFAXAN 550 mg tablets significantly reduced the risk of overt hepatic encephalopathy (HE) recurrence over a six month period, maintaining remission more effectively than placebo. Additionally in this study, XIFAXAN 550 mg treatment significantly reduced the risk of hospitalization for HE. HE is a serious disorder caused by chronic liver failure, resulting in cognitive, psychiatric and motor impairments. On March 24, 2010 the FDA approved the use of XIFAXAN 550 mg tablets for reduction in risk of overt hepatic encephalopathy recurrence in patients 18 years of age or older.

This 299 subject, double-blind, placebo-controlled, multinational, Phase 3 clinical trial, the largest randomized trial of maintenance therapy in HE conducted to date, demonstrated a statistically significant and clinically meaningful reduction in the risk of recurrent overt HE. The primary endpoint—the risk of experiencing a breakthrough overt HE episode—was reduced by 58 percent in XIFAXAN 550 mg-treated subjects compared with placebo (p < 0.0001). The key secondary endpoint—risk of experiencing HE-related hospitalization—was reduced by 50 percent in XIFAXAN 550 mg-treated subjects compared with placebo (p = 0.0129).

“These results underscore the value and potential of rifaximin as a highly effective treatment for hepatic encephalopathy,” said Nathan M. Bass, M.D., Ph.D, Professor in the Department of Medicine at the University of California, San Francisco (UCSF), and lead study author. “A therapy that significantly reduces the risk for episodes of overt HE and produces a highly significant effect in protecting patients with a history of HE, increasing the duration of remission over six months, is a clinical breakthrough that addresses one of the greatest unmet needs for patients with advanced liver disease.”

“The publication of the results of our pivotal trial of XIFAXAN 550 mg tablets in overt hepatic encephalopathy in today’s issue of The New England Journal of Medicine provides a timely opportunity for the dissemination of information on the first clinical treatment option for HE patients approved in the U.S. in more than 30 years,” said Bill Forbes, Pharm.D., Executive Vice President of Research and Development and Chief Development Officer at Salix Pharmaceuticals. “The availability of XIFAXAN 550 mg tablets should serve to address the need for a therapeutic intervention to reduce the recurrence of overt HE as well as the number of hospitalizations associated with this serious condition.”

XIFAXAN has been granted Orphan Drug designation by the FDA for use in hepatic encephalopathy. With XIFAXAN 550 mg tablets now approved by the FDA, Salix believes this designation should provide seven years of marketing exclusivity in the United States.

HE occurs frequently in patients with cirrhosis as a result of end-stage liver disease. Typically cirrhosis is caused by a number of factors, such as alcohol and/or drug abuse, chronic viral hepatitis and autoimmune disease. Currently, there are more than 600,000 cases of cirrhosis in the United States. Cirrhosis is the third most common cause of death, after heart disease and cancer, in people aged 45–65 years in the United States. An estimated 25,000 people die of cirrhosis each year in the United States. The number of cases of liver disease worldwide is rapidly increasing, with the estimated prevalence of chronic liver disease in the United States to be between six and seven million cases. There are reported to be approximately 200,000 patients in the United States with overt HE.

For more information, please visit our Web site at www.salix.com or contact the Company at (919) 862-1000.