

Brief Meeting Reports from the American College of Surgeons 2002 Clinical Congress

Patients Achieve Good Functional Quality of Life After Surgical Treatment for Rectal Cancer

The primary goal of any surgical treatment for cancer is, of course, long-term survival. However, the quality of life after treatment is becoming an increasingly important factor. For surgeons who treat patients with rectal cancer, quality of life depends in part on the surgeon's ability to preserve bowel function. "Surgeons want to preserve bowel function and avoid creating a permanent colostomy, but not at the expense of adversely affecting patients' quality of life," Kirk A. Ludwig, MD, an assistant professor of surgery at Duke University Medical Center, Durham, NC, said.

According to findings from a Duke University study presented at the 2002 Annual Clinical Congress of the American College of Surgeons, the vast majority of patients have good to excellent quality of life after surgery for rectal cancer. Quality of life scores were similar whether patients underwent a procedure that creates a permanent colostomy after surgically removing rectal cancer or one that avoids a colostomy by preserving the anal sphincter and restoring the continuity of the gastrointestinal tract.

There was no statistically significant difference in quality of life scores between the two groups of patients on the Short Form-36 (SF-36) survey, and no differences between the groups in the use of medications, type of diet, need for restricting activity, or degree of overall satisfaction with the outcome of surgery. In addition, 77 percent of patients who had sphincter-preserving surgery had excellent or good bowel function as measured by a postoperative bowel function questionnaire. Fewer than 10 percent had poor bowel function, Dr. Ludwig said.

The study included 130 patients who received combined chemotherapy and radiation followed by surgical resection. Seventy-seven patients underwent abdominal perineal resection (APR) and 57 had low anterior resection (LAR). During APR, colorectal surgeons resect cancerous tissue, remove the rectum and anus, and construct a permanent colostomy. Surgeons preserve the anus and sphincter muscles and surgically connect the colon to the anus after excising malignant tissue during LAR.

All patients in the study completed an SF-36 questionnaire, which is the most widely used health status survey in the world. It utilizes 36 questions to assess physical as well as mental status. LAR patients completed a bowel function questionnaire adapted from one developed at Memorial Sloan Kettering Cancer Center, New York, NY. The questionnaire asked patients to report the number of bowel movements they had per day, whether they were able to control flatus, how often they experienced stool leakage, and whether they needed medication to control bowel movements.

The vast majority of patients who underwent LAR had excellent bowel function (normal continence, i.e., one to two bowel movements per day, and good evacuation) or good bowel function (i.e., three to four bowel movements per day and occasional clustering of bowel movements with or without incontinence to gas). Only six patients (8 percent) felt their bowel function was so poor after LAR that they wanted to convert to a colostomy, Dr. Ludwig reported.

Patients who underwent APR were asked about the maintenance of the colostomy bag. Although 15 of these patients (27 percent) said they were embarrassed by their colostomy, having a colostomy was not detrimental to their quality of life. "We thought the APR patients would have a lower quality of life just based on the fact that they had a colostomy, but that's not what we found," Dr. Ludwig said.

Overall, in the United States, there are about 50,000 newly diagnosed cases of rectal cancer annually. Treatment of rectal cancer has evolved over the last 50 years. "There was a time in the middle part of the last century when it was a feat to get someone through an operation for rectal cancer," Dr. Ludwig explained. "The focus of treatment at that time became optimizing oncologic outcomes. More recently, optimizing function and quality of life have become major issues," he added.

"The issue now is how we can improve quality of life following rectal cancer surgery. For most people, that translates into avoiding a permanent stoma and having bowel movements through the anus rather than into a colostomy bag. But the quality of life can be just as good with APR," Dr. Ludwig said. "The decision to preserve the anal sphincter or create a colostomy is complicated and depends on technical and surgical considerations, the

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patient's age, and functional status. The good news is that after surgery for rectal cancer, most patients achieve good or excellent quality of life from a functional standpoint," he concluded.

Kirsten Wilkens, MD; Ryan Fields, BS; Mark Onaitis, MD; Matthew Kalady, MD; Hilliard Seigler, MD, Douglas Tyler, MD, and Christopher Mantyh, MD, also participated in the study of quality of life after rectal cancer surgery.

Gastric Bypass Surgery Can Increase Life Expectancy for Morbidly Obese patients

Gastric bypass is one of the most common and effective surgical treatments for morbid obesity. Researchers at Dartmouth-Hitchcock Medical Center, Lebanon, NH, have found that the procedure not only can help patients take excess weight off and keep it off, it may also increase life expectancy by three years or more. The researchers conducted a statistical analysis of a wide variety of epidemiological and surgical studies and found that on average, a 40-year-old woman with a body mass index (BMI) of 45 kilograms per meter squared or greater would gain three years of life expectancy after undergoing a gastric bypass procedure.

In presenting their results, the researchers reported that obese individuals in other age or gender groups would have similar gains in life expectancy. Females at the age of 20 would gain 3.4 years of life after gastric bypass. Males at age 40 would gain 3.9 years of life, and at age 20 they would gain 3.5 additional years. (BMI is calculated by multiplying an individual's weight by the height squared.) According to many clinical investigations, individuals with a BMI between 18 and 22 live longer than those with a higher BMI. Individuals with a BMI greater than 25 are considered to be overweight. Morbidly obese individuals, who have BMIs of 40 or greater, are 100 or more pounds overweight.

The Dartmouth-Hitchcock study is the first to use statistical analyses to predict life expectancy after gastric bypass. Other studies have compared mortality rates in morbidly obese patients who had gastric bypass and those who did not. "There has not been any long-term prospective weight-loss studies showing increased life expectancy," Dr. Pope said. The study evaluated life expectancy for individuals who had gastric bypass and

those who had no treatment for morbid obesity. The investigators did not include morbidly obese patients who had tried other forms of weight loss, such as dietary manipulation or medications, because most clinical trials show that patients who choose nonsurgical weight loss options lose only five to 10 pounds in the first year and gain all the weight back in the next two to three years. Patients who undergo gastric bypass, on the other hand, lose around 70 percent of their excess body weight in the first year after surgery. They maintain 60 percent excess weight loss for up to five years and 50 percent excess weight loss at 10 years, Dr. Pope said.

The researchers compiled and evaluated accumulated statistics from a large number of sources. Life-table data from the most recent US census were used to compute baseline mortality risks by age and weight. A large-scale, prospective epidemiological study of more than 84,000 men and 97,000 women by the American Cancer Society Cancer Prevention Study II Nutrition Cohort provided information on mortality and survival related to obesity and physical activity at various points in life. More than 20 clinical studies of gastric bypass patients provided long-term outcome data three or more years after surgery.

It is important to remember that because the study is not a formal, randomized clinical trial assessing longevity in groups of obese patients who are treated with gastric bypass or who serve as controls, its findings are not entirely predictive, Dr. Pope cautioned. "The data from the study may be something obese patients can look at and realize that their life could be extended by this operation, but I don't think they can definitively bank on the data. This study needs to be confirmed by long-term prospective studies that follow patients for years and prove the benefit in life expectancy in real patients, not just in our statistical simulation," he explained.

In gastric bypass surgery, staples are used across the stomach to reduce its capacity by approximately 90 percent. A portion of the small intestine is attached to the stomach above the staple line so food passes directly from the surgically created gastric pouch and into the intestine. Because the stomach is reduced in size and the

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connection between the gastric pouch and intestine is small (only about 1 centimeter), patients cannot consume large meals.

According to Dr. Pope, the number of gastric bypass procedures in the United States more than doubled between 1990 and 1997 and then doubled again between 1997 and 1999.

Samuel R. G. Finlayson, MD, MPH, and John D. Birkmeyer, MD, participated in the analysis of data on gastric bypass surgery.

Laparoscopic Tour of the Abdomen Helps Medical Students Learn Basic Anatomy

First-year medical students at the Medical College of Wisconsin, Milwaukee, are taking a laparoscopic tour of the abdomen in their anatomy class to see how internal organs exist in three-dimensional time and space. By watching surgeons perform a procedure they eventually will learn during their clinical clerkships, the students begin to understand how a firm grasp of basic anatomy will be useful when they are practicing physicians and conducting physical examinations. "Through the laparoscope, students can see where the gallbladder is in relation to the abdominal wall, and why gallbladder disease will cause pain in certain parts of the body. Students can see that the appendix is closely related to the bladder and why appendicitis can cause bladder irritation," Karen Brasel, MD, an assistant professor of surgery, said.

The relationships between abdominal organs often is difficult to comprehend in standard, open anatomic dissection of cadavers, Dr. Brasel explained, because students remove superficial organs to observe the structures that lie beneath. By viewing a laparoscopic dissection, however, medical students observe the organs in place and track on a video screen the path of the surgical telescope as it passes around and in between the small bowel, the appendix, the bladder, and the diaphragm.

Dr. Brasel and her colleague, Gary L. Kolesari, MD, PhD, director of the gross anatomy course, for the last three years have been conducting laparoscopic demonstrations of the abdominal anatomy of embalmed cadavers, which medical students commonly dissect in the gross anatomy laboratory. Before each demonstration, the surgeons make three small incisions—one in the

umbilical area, one in the upper right quadrant, and one in the upper left quadrant—to accommodate laparoscopic instruments. They remove the lungs to allow greater expansion of the diaphragm and better visualization of the remaining abdominal structures. The surgeons also dissect the common bile duct, gallbladder, and cystic duct to demonstrate abdominal anatomy.

During a four-hour anatomy class, the surgeons hook up laparoscopic instruments and a video camera to a viewing monitor to project images of anatomy as they move the tools throughout the abdomen. After a one-hour demonstration that is displayed to all 200 students in class, the surgeons allow small groups of students to operate the instruments themselves and get a closer look at abdominal structures. Since Drs. Brasel and Kolesari have been performing laparoscopic dissections for the medical school anatomy class, the procedure has become increasingly popular. According to a study presented, medical students consider the laparoscopic demonstration of anatomy to be an effective educational tool. A total of 78 percent of the first 200 students to watch a laparoscopic dissection felt that being exposed to anatomy using the surgical telescope enhanced their learning, and 86 percent said the laparoscopic program should be expanded.

Drs. Brasel and Kolesari are exploring ways to improve the demonstrations. At the present time, the surgeons have access to only one laparoscopic video tower and therefore can dissect only one cadaver at a time. "This isn't something that groups of four students can use on their own cadavers; they have to take turns looking at the cadaver that we are dissecting and participate through the video projection. One question is whether we will be able to expand the program and allow students to perform their own laparoscopic dissections," Dr. Brasel said.

Colleen M. Fitzpatrick, MD, the surgical resident who designed and implemented the laparoscopic anatomic dissection program, explained that the program adds a practical dimension to the formal course in anatomy. "Students see more clearly how their work in the anatomy laboratory will apply to their lives as physicians," she said.

Drs. Brasel, Kolesari, and Fitzpatrick were the only physicians involved in the study. ■

Leading Scientific Experts Create Awards Program for Establishment of Centers for Clinical Immunology

Centers to Concentrate on Multidisciplinary Approach to Patient Care

The Federation of Clinical Immunology Societies (FOCIS) announced the formation of a designation and grant program to assist academic institutions in establishing comprehensive FOCIS Centers to promote multidisciplinary scientific and clinical innovation, education, and advocacy in their local communities. Through this Request for Application (RFA) grant process, FOCIS will designate specific centers of clinical immunology as FOCIS Centers and will provide seed funds up to \$25,000 for 12 of those academic institutions with a developing and/or an established center of clinical immunology. The RFA was developed by a group of scientists and physicians from 25 leading universities and hospitals across the country, under the auspices of FOCIS.

“Through these grants, we hope to enable academic institutions to engage in meaningful, cross-disciplinary education and research collaborations that will serve as a model for how medicine will be practiced in the future,” said C. Garrison Fathman, MD, Stanford University School of Medicine and FOCIS Chair. “We believe that the FOCIS Centers will provide excellence in education and clinical research and provide the highest level of care for patients who have immunological diseases—an important goal, as one in four patients admitted to hospitals across the country suffers from some form of immune-mediated inflammatory disorder.”

In addition to accepting applications requesting seed funds, FOCIS will also accept RFA’s from institutions that seek recognition as FOCIS Centers, yet do not need grant money for the advancement of their clinical immunology centers. Institutions that qualify will become part of the prestigious network of FOCIS Centers nationwide. As leaders in their respective fields, these centers will share an interest in the education about, and in the research, diagnosis and treatment of, **immune-mediated inflammatory disorders (I.M.I.D.)**—a group of disorders that share common inflammatory pathways and are characterized by immune dysregulation that results in acute or chronic

inflammation, causing injury to the body. Injury can include organ damage, increased morbidity, or mortality.

One underlying manifestation of this immune dysregulation is the inappropriate activation of inflammatory cytokines, such as IL 12, IL 6 or TNF-alpha, whose actions lead to pathological consequences. Conditions that are referred to as **I.M.I.D.** include, but are not limited to, arthritis, inflammatory skin conditions, transplant-related diseases, inflammatory bowel diseases, cancer, allergies, cardiovascular diseases, asthma, chronic obstructive pulmonary disease and endocrine diseases.

“The establishment of a center to address patients’ immune-mediated inflammatory disorders has enabled our institution to better serve its patients,” said David Huston, MD, Baylor College of Medicine, Director of Baylor’s Biology of Inflammation Center. “The FOCIS Centers are an important step in demonstrating the significant value of collaborative medicine.”

Applications for FOCIS Centers will be judged on the quality of the plan for the Center, the value of the seed funds in advancing the success of the center, and on the potential to use the seed funds to obtain matching or challenge funds. The RFA should include plans for clinical research; clinical programs focused on immunotherapy; education programs for physicians and the public; and community outreach. New and developing centers are encouraged to apply. Applications are due by February 1, 2003, and awards will be issued in the first and third quarters of 2003.

The Federation of Clinical Immunology Societies (FOCIS) provides a scientific forum to foster the cross-disciplinary approach required to understand and treat immune-based diseases as the discipline of clinical immunology evolves; a better understanding of the shared pathophysiological underpinnings of clinical immunology and the new therapeutic approaches suggested by these novel relationships, including the increasingly widespread use of biologics in therapy; a forum for education of trainees, physicians, patients and the public in the discipline of clinical immunology; and advocacy in public policy issues.

In its third year of existence, FOCIS has 20 Member Societies and seven Affiliate Societies, representing approximately 30,000 clinician scientists. For

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more information or to request the RFA, please call FOCIS at 414-224-8095 or visit www.focisnet.org.

FOCIS secured an educational grant to assist academic institutions in establishing these centers from Centocor, Inc., the manufacturer of REMICADE® (infliximab), indicated for the treatment of rheumatoid arthritis and Crohn's disease.

Treatment with Infliximab May Induce Clinical Remission, Reduce Need for Steroid Use in Ulcerative Colitis

Treatment with infliximab (REMICADE®) appears to induce clinical remission in many patients with moderate-to-severe ulcerative colitis (UC), including those with severe disease, according to research published in the October issue of the *American Journal of Gastroenterology*. In addition, a significant number of patients were able to reduce or eliminate the need for steroid use. UC is a chronic and debilitating gastrointestinal disorder that affects approximately a half-million Americans.

"There is a significant unmet medical need in patients with moderate-to-severe ulcerative colitis," said Gary Lichtenstein, M.D., Associate Professor of Medicine, Director of the Center for Inflammatory Bowel Diseases, Hospital of the University of Pennsylvania. "These data show that treatment with infliximab provides a significant clinical benefit thereby reducing dependence on steroids. This has potential to eliminate the need for surgical intervention."

UC is a chronic inflammatory bowel disorder that begins in late childhood or early adulthood. Inflammation occurs in the colon, resulting in symptoms including abdominal pain, bloody diarrhea, fatigue, weight loss, rectal bleeding, loss of body fluids and nutrients.

A total of 27 patients with active UC received either a single or multiple dose of 5 mg/kg infliximab. Repeat infusions were administered at intervals determined by the treating physician based upon the patient's clinical response. Results were assessed using established mod-

ified Disease Activity Index (DAI). Mild, moderate, and severe disease was defined as a score of 1-3, 4-6, and 7-9, respectively. Clinical response was categorized as remission (DAI score of zero), partial response (improvement by >3 points) or no response.

At baseline, 24 patients were defined as severe, two as moderate and one as mild. After treatment with infliximab, 12 patients (44 percent) were in remission, an additional six patients (22 percent) had a partial response and nine patients (33 percent) had no response. Overall, the patients' rating as defined by DAI decreased from severe (8) to mild (2), excluding 3 patients (one patient who had only short follow-up; two patients underwent colectomy). In addition, among patients who were steroid dependent at baseline (10), three were able to eliminate steroid use, while six were able to reduce steroid dosage from a mean dose of 37 mg/day to 12 mg/day.

Among patients with severely active disease, multiple infusions were found to be more effective than a single dose for inducing clinical remission. Among the 11 patients that received multiple infusions, five achieved remission (45 percent), four had a partial response (36 percent) and two were non-responders (18 percent), respectively. In comparison, among 13 patients who received a single infusion, six patients achieved remission (46 percent), one had a partial response (8 percent) and six were non-responders (46 percent), respectively.

During the study, three patients reported adverse events: one reported fatigue; two patients, who did not respond to infliximab therapy, underwent total colectomies. Postoperatively, one patient developed candidemia that was successfully treated with medications and the other patient died (no causal relationship between treatment and the death has been determined).

These data support the need for a large, randomized, controlled study to determine the safety and efficacy of single and multiple doses of infliximab in the treatment of active UC. In addition, further research is needed to determine its role in the maintenance of remission and as a steroid-sparing agent. ■

ORDER PRACTICAL GASTROENTEROLOGY REPRINTS

Understanding Hepatitis

Achord JL

University Press of Mississippi, Jackson, MS 2002
 ISBN:1-57806-435-X, \$28.00 cloth binding;
 \$12.00 paper binding

Understanding Hepatitis is a comprehensive and in-depth overview of hepatitis in all of its forms including Hepatitis A, B, and C. Chapter 1, The Liver and Hepatitis, provides an extensive discussion of the physiology and pathophysiology of the disease with Chapter 2, What Happens When You Have Hepatitis, offering a clearly written synopsis of symptoms and complications. Each subsequent chapter covers each form of the disease more in-depth, discussing prevalence, diagnosis, management and prevention. There is a useful glossary of terms and a full index. A somewhat-limited appendix provides the reader with one additional recommended book, organizations to contact, and on-line resources.

The book is written for the patient suffering with hepatitis who is seeking medical information bordering on a level that is rarely provided on a widespread basis to patients, such as in a doctor's office or at other points of care. Perhaps the average hepatitis sufferer may find this book a bit difficult to assimilate, the language being a little too technical for the average non-medical reader. Adding photos, color plates, or more sophisticated illustrations would enhance the book.

Overall, Dr. Achord has written a well-organized, in-depth book on hepatitis, which, for any lay person seeking detailed medical information on the disease, will prove to be a valuable resource.

Susan Gardinor
 Sacramento, CA

Sleisenger & Fordtran's Gastrointestinal and Liver Diseases: Pathophysiology/Diagnosis/Management, 7th edition

W. B. Saunders 2002

ISBN: 0-7216-8973-6 (CD-ROM: 0-7216-9284-2)
 \$ 229.00 (CD-ROM: \$229.00; combined: \$329.00)

It has been thirty years since the first edition of this book was published. The 7th edition is more comprehensive than the 6th and has a new color page format that makes it more user friendly and eye catching.

There are several new authors and a separate section has been devoted to psychosocial factors in gastrointestinal disease. Inclusion of chapters by authors from outside of the field of gastroenterology and hepatology adds an important dimension. The illustrations have been placed within the appropriate chapters that makes it very convenient for the reader. In the past color photos were in a separate section and necessitated a back and forth approach. The inclusion of new imaging and pathology editors has ensured that the illustrations are of the highest quality. Certain topics like protozoal and nonprotozoal infections have been given separate chapters, which leads to a greater and in depth discussion of these topics.

This book is also available in CD-ROM, which permits one to access all the text and figures and makes it easy to search for a specific topic. For the most recent references a link is provided to abstracts on Medline. The illustrations can be exported as Powerpoint® slides if one would like to use them for presentations. The availability of a CD-ROM version is a definite plus for the latest edition of this classic textbook of gastroenterology and hepatology.

A potential drawback of any text when compared to such on-line references such as UpToDate® in gastroenterology and hepatology is the time it takes for the textbook to be published and the inability to include subsequent updates in a timely fashion. Obviously the cost for UpToDate® to an individual is much higher for the electronic version that requires an initial subscription and an annual renewal fee. Sleisenger and Fordtran's book/CD-ROM package is a steal at \$329; the cost for the book or the CD-ROM alone is \$229.00.

In summary, the 7th edition of Sleisenger and Fordtran's gastrointestinal and liver diseases is a must for all those who are involved in the care of patients with gastrointestinal and liver diseases. It is an easy to read text that encompasses all clinical aspects of gastroenterology and hepatology.

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Neutropenia During Treatment of HCV

One hundred and nineteen patients with chronic hepatitis C, treated with a combination of Interferon Alfa and ribavirin were analyzed. Neutropenia was not used as an exclusion or dose modification criteria. In multivariate analysis, only black race was associated with baseline neutropenia. During treatment, neutrophil counts decreased by an average of 34 percent. Among 3 blacks with baseline neutropenia without cirrhosis or splenomegaly, there was little or no decrease in neutrophil counts, despite decreases in platelet and lymphocyte counts.

Documented or suspected bacterial infections developed in 18 percent, but in no patient with neutropenia.

It was concluded that neutropenia is frequent during treatment of hepatitis C with Interferon and Ribavirin, but is not usually associated with infection. Constitutional neutropenia, which is common among blacks, should not exclude patients from therapy with Interferon, as these patients usually have minimal further decreases in neutrophil counts on therapy and are not excessively prone to bacterial infections. (Soza A, Everhart JE, Ghany MG, et al. "Neutropenia During Combination Therapy of Interferon Alfa and Ribavirin for Chronic Hepatitis C." *Hepatology*, 2002; Vol. 36, pp. 1273-1279.)

Infliximab and Ulcerative Colitis

Data from all ulcerative colitis patients receiving Infliximab at four institutions were analyzed and monitoring disease activity index. A total of 27 patients were evaluated as single or multiple infusions. Twelve patients achieved remission and six patients had partial response. Nine patients had no response. Five subsequently underwent total colectomy. The median time to which response and remission was achieved was four days and the median duration was 8 weeks. Nine of the 18 patients who responded experienced 19 relapses. Eighteen of these relapses were successfully treated with repeat infusions. Steroid refractory patients were less likely to respond to Infliximab than were steroid-responsive patients. Death occurred in one case.

It was concluded that preliminary evidence suggests effectiveness of Infliximab in the treatment of ulcerative

colitis, including medically refractory severe disease. Individuals who are refractory to corticosteroids, however, may be unlikely to respond to Infliximab. (Su C, Salzberg BA, Lewis JB, et al. "Efficacy of Anti-Tumor Necrosis Factor Therapy in Patients with Ulcerative Colitis." *American Journal of Gastroenterology*, 2002; Vol. 97, pp. 2577-2584.)

Azathioprine in Refractory Sprue

Seven consecutive patients with a well-defined diagnosis of refractory sprue and a lack of response to oral or parenteral steroids were studied. Five patients had endoscopic evidence of ulcerative jejunitis and five underwent exploratory laparotomy for exclusion of malignancies.

The characteristic monoclonal PCR gamma gene rearrangement was shown in five of the patients studied. The patients were treated for a mean of 11 months in a prospective, open-label, non-placebo controlled study using Azathioprine 2mg/kg per day, plus oral Prednisone, 1mg/kg per day and a gluten-free diet with enteral and parenteral nutrition.

After treatment, five patients had complete clinical remission and biochemical and nutritional parameters were significantly improved. Steroids were tapered after the onset of Azathioprine therapy and were completely discontinued at the end of the trial. Intestinal histology improved significantly in all cases. Two patients did not respond to treatment and died in 9 to 10 months. No overt lymphoma was demonstrated during the follow-up. (Maurin E, Niveloni S, Chernavsky A, et al. "Azathioprine and Refractory Sprue: Results From a Prospective, Open-Label Study." *American Journal of Gastroenterology*, 2002; Vol. 97, pp. 2595-2602.)

Sampling Error in Liver Biopsy With HCV Infection

One hundred and twenty-four patients with chronic hepatitis C virus infection underwent simultaneous laparoscopy-guided biopsies of the right and left hepatic lobes. Slides were blindly coded and randomly divided along two hepatopathologists. Inflammation and fibrosis were scored according to the standard grading and staging method, based on the modified Scheuer system.

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Thirty of 124 patients had a difference of at least one grade, and 40 of 124 patients had a difference of at least one stage between the right and left lobes. A difference of two stages or two grades was found in only 3 and 2 patients, respectively.

It was interpreted that liver biopsy samples taken from the right and left hepatic lobes differed in histologic grading and staging and allotted for a portion of chronic hepatitis C virus patients. However, differences of more than one stage or grade were uncommon. A sampling error may have led to underdiagnosis of cirrhosis in 14.5 percent of patients. These differences could not be attributed to intraobserver variation, which appeared to be low. (Regev A, Bareho M, Jeffers L, et al. "Sampling Error and Intraobserver Variation on Liver Biopsy in Patients With Chronic HCV Infection." *American Journal of Gastroenterology*, 2002 Vol. 97, pp. 2614-2618.)

Medical Therapy Vs. Endoscopic Ligation In Bleeding Varices

One hundred and two patients with cirrhosis and a recent esophageal variceal bleed were randomized to either endoscopic banding (51 patients), or medical therapy (51 patients). Primary end points were definitely rebleeding. At one year, 43.7 patients had bled in the drug arm, compared with 53.8 in the banding arm. 32.8 percent of the patients off medical therapy had died at one year, 22.5 percent on banding.

It was concluded that in the prevention of variceal rebleeding, beta blockers, with or without nitrates are as effective as endoscopic banding. (Patch D, Sabin CA, Goulis J, et al. "A Randomized, Controlled Trial of Medical Therapy Vs. Endoscopic Ligation for the Prevention of Variceal Rebleeding in Patients With Cirrhosis." *Gastroenterology*, 2002; Vol. 123, pp. 1013-1019.)

Budesonide in Collagenous Colitis

Fifty-one patients were randomized with chronic diarrhea and histologically-proven collagenous colitis to receive either oral Budesonide 9mg q day for 6 weeks or a placebo. Complete colonoscopy was performed before and after treatment, with histopathology assessed by a single pathologist blinded to patient's treatment.

Forty-five patients were available for PER protocol analysis. The rate of clinical remission was significantly higher in the Budesonide group than in the placebo group, 86.9 percent vs. 13.6 percent, respectively. Histologic improvement was observed in 14 patients of the Budesonide group (60.9 percent), and in one patient in the placebo group (4.5 percent).

It was concluded that oral Budesonide is an effective and safe treatment modality for patients with collagenous colitis. Long term follow-up would be necessary to investigate whether the clinical and histologic remission is sustained. (Miehlke S, Heymer P, Bethke B, et al. "Budesonide Treatment for Collagenous Colitis: A Randomized, Double-Blind, Placebo-Controlled, Multi-Centered Trial." *Gastroenterology*, 2002; Vol. 123, pp. 978-984.)

Small Bowel X-ray and Video Capsule Endoscopy

Twenty-two patients were selected consecutively because of suspected small bowel disease. Video capsule endoscopy was compared in 20 patients. Barium follow-through was normal in 17 and showed ilial nodularity in three patients. Capsule endoscopy was normal in 3 patients and showed positive findings in the remaining 17 patients.

The barium study was considered diagnostic in four patients. The capsule endoscopy was considered diagnostic in nine patients, suspicious in 8 patients and failed in 3 patients. For obscure gastrointestinal bleeding, the diagnostic potential of barium follow-through was much worse when compared to the capsule endoscopy, which was well tolerated and better accepted by patients when compared with the most recently performed endoscopic procedures.

The video capsule endoscope was found to be superior to small bowel radiograph for evaluation of small bowel diseases, but requiring further assessment because of limitations such as difficulty in interpretation of potentially nonspecific findings. (Costamagna G, Shah S, Ricconi ME, Poschia F, et al. "A Prospective Trial Comparing Small Bowel Radiographs and Video Capsule Endoscopy For Suspected Small Bowel Disease." *Gastroenterology*, 2002; Vol. 123, pp. 999-1005.)

Murray H. Cohen, D.O., editor of "From the Literature" is a member of the Editorial Board of *Practical Gastroenterology*.