First-of-its-kind Study Shows How Well Frequent Heartburn Sufferers Follow Directions for Over-the-counter Prilosec

Consumers Follow OTC Medicine Directions Well

Prilosec OTC has become one of the leading over-the-counter remedies for treating frequent heartburn. Prilosec OTC contains the same active drug component (omeprazole) as prescription Prilosec.

Some health professionals have questioned whether consumers will use the over-the-counter product as intended. But research published in the journal Clinical Gastroenterology and Hepatology, January, 2004 shows that frequent heartburn sufferers are able to follow and comply with the directions on the package label.

“A substantial majority of people who purchased Prilosec OTC complied very well with the label instructions” said lead author, Mark Fendrick, M.D., the University of Michigan professor who led the evaluation of this study. “And, contrary to some concerns that Prilosec OTC would result in decreased physician visits, this study showed that frequent heartburn sufferers actually increased consultation with their physicians.”

“The study shows that consumers can use Prilosec OTC correctly to manage their frequent heartburn,” said co-author Greg Allgood, Ph.D., Associate Director at the P&G Health Sciences Institute. “This research supports the U.S. Food and Drug Administration’s decision to make Prilosec OTC more readily accessible to the tens of millions of Americans with frequent heartburn.”

Study Shows Drug Can Heal, Reduce Recurrence of Fistulas in Crohn’s Disease

An international study reported in the February 26 New England Journal of Medicine found that maintenance therapy with the drug infliximab, a monoclonal antibody used to treat Crohn’s disease, can prevent or delay the recurrence of fistulas, a common complication of that inflammatory bowel disorder. Patients receiving infliximab on a regular basis were twice as likely to avoid fistula recurrence than were patients receiving a placebo.

The study was largely supported by the pharmaceutical firm Centocor, a subsidiary of Johnson & (continued on page 54)
Johnson, which markets infliximab under the brand
name Remicade.

Crohn’s disease is a chronic inflammatory disor-
der of the digestive tract that affects about half a mil-
lion people in the U.S. Patients with more severe
symptoms may develop fistulas. The presence of fistu-
las can seriously impact patients’ quality of life and
increases the likelihood of surgical treatment, which
may not have satisfactory results. Infliximab, which
targets the inflammatory protein tumor necrosis factor,
has been shown in previous research to reduce symp-
toms in patients without this complication and to heal
fistulas over a limited period of time.

“Fistulas can be a devastating complication of
Crohn’s disease,” says Bruce Sands, MD, of the Mass-
achusetts General Hospital (MGH) Gastrointestinal
Unit, lead author of the report. “While neither medical
nor surgical therapy is perfect in treating this compi-
lcation, our study has shown that maintenance treat-
ment with infliximab can produce durable closure of
fistulas in many patients.”

The current study—carried out at 45 sites in North
America, Europe and Israel—enrolled adult patients
with fistulizing Crohn’s disease not previously treated
with infliximab. Almost 300 participants completed a
preliminary phase of treatment, receiving three intra-
venous doses of infliximab over six weeks. They were
evaluated several weeks later to determine whether
they responded to the infliximab treatment—defined
as a 50 percent or greater reduction in the number of
draining fistulas—and subsequently randomized into
groups receiving either continuing infliximab doses
every eight weeks or placebo infusions. Neither par-
ticipants nor the researchers knew to which groups
patients were assigned.

Among participants who initially showed a
response to infliximab, fistulas recurred much less fre-
cently among those receiving continuing treatment
than in the placebo group. At the end of the 54-week
study, almost half those receiving infliximab still
showed some response, with more than one-third
remaining free of fistulas. Less than 20 percent of the
placebo group stayed fistula-free during the same time
period.

“The benefits of infliximab in this patient popula-
tion go beyond closing of fistulas,” Sands explains.
Inflammatory Bowel Diseases

This comprehensive text addressing the spectrum of illnesses we call inflammatory bowel diseases accomplishes its goal of presenting the current knowledge of these conditions in a clear and accessible format. The book has six sections: Historical review and perspectives; Pathogenesis; The clinical presentation and diagnosis of inflammatory bowel disease; Medical Treatment; Surgical Treatment; and Complications and clinical problems in inflammatory bowel disease.

Considering the rich history of the struggle by clinicians and scientists to comprehend the etiology and management of inflammatory bowel disease the section on “Historical review and perspectives” seemed lacking in depth. With that single criticism, the content, style, and format of the book are very well done. Each chapter begins with an overview listing the goal of the writer, followed by three key points to be understood by the reader, and a list of three key references. Careful editing has resulted in a logical presentation of the information that makes for enjoyable reading.

The strongest section is the one on Pathogenesis, edited by Claudio Fiocchi. These eleven chapters succinctly review an often overwhelming amount of literature regarding the quest for a better understanding of these diseases. This section should be especially helpful to physicians in training.

The sections regarding diagnosis and treatment provide comprehensive information divided into sections that increase the usefulness of the book as a reference text. Diagnostic tools, including new imaging techniques, are individually reviewed. Therapeutic options, both medical and surgical, are discussed in an evidence-based format that should be helpful in addressing the difficult choices when the patient is not doing well.

The thirteen chapters in the section regarding Complications and Clinical Problems in IBD include the troublesome issues of fistulizing Crohn’s disease, thrombosis, and anemia. There are separate chapters reviewing issues in children, pregnant women, and the elderly. Health maintenance is considered in the reviews of cancer risk and osteoporosis. The chapter regarding Frequently Asked Questions about IBD is notable for the clarity of its presentation in language that should be easily comprehended by most patients. The Quality of Life Issues for the IBD Patients reviews the difficulty of studying and separating chronic disease from other determinants impacting the patient’s perceived quality of life. This presentation of the issues may be very helpful in counseling and caring for these patients.

I recommend this book as an effective introduction to IBD for the trainee and as an accessible reference text for the practicing senior physician. Compiling a book of this quality and completeness was an arduous undertaking and the effort resulted in a worthwhile text.

Rambie Briggs, MD, Lago Vista, Texas

Gastrointestinal Cancers
Anil Rustgi, Ed., W. B. Saunders, 2003 ISBN: 0-7216-8963-9; $149.00

This textbook is a remarkably detailed sourcebook for information regarding many aspects of gastrointestinal cancer. Edited by the Chief of Gastroenterology at the University of Pennsylvania, and the Chair of Pathology at the University of Florida College of Medicine, chapter authors are a variety of nationally recognized specialists in their respective fields from centers throughout the country.

The book is divided into two segments. The first is a basic science review of many aspects of the development of tumors including a summary of current genetic factors and markers. This includes other information about tumor spread including anatomic principles of metastases of different organs affected, and mechanisms of metastases. The second segment is an organ-by-organ review of clinical aspects of each cancer, including review of treatment modalities. This segment is well-balanced, including diagnostic tests, chemotherapy, radiation, and surgical treatment principles for each organ.

Although not an exhaustive source for any one area, it is an admirably complete review of current treatment of GI cancer. There is something here for all who treat GI cancers—the gastroenterologist, the medical oncologist, the radiation oncologist, and the surgeon. Diagrams and tables are clear, and text is readable. An excellent section of color plates is present to demonstrate micrographs and gross specimens.

I would recommend this book for anyone who has an interest in GI cancer. It will be a valuable reference for treatment and has detailed basic science information for those who seek understanding of current mechanisms of tumorogenesis and treatment.

Bryan Fandrich, MD, Sacramento, CA 95825

George W. Meyer, M.D., Book Editor, is on the Editorial Board of Practical Gastroenterology
These patients also have a reduction in other symptoms and demonstrable improvement in their quality of life. While infliximab is not effective for all patients, the impact can be remarkable for those who do respond.” Sands is an assistant professor of Medicine at Harvard Medical School.

The researchers also note that continuing treatment at fixed intervals appears superior to waiting until symptoms recur to reinstate therapy. Patients in the placebo group who redeveloped fistulas during the study could resume infliximab treatment, but although many experienced a renewed response to the medication, they all had to deal with worsening symptoms. Since infliximab does suppress part of the immune response, patients on sustained therapy should be followed closely for evidence of infection or other serious side effects.

Additional authors of the NEJM paper include senior author Sander van Deventer, MD, PhD, of Academisch Medisch Centrum, Amsterdam; Frank Anderson, MD, Vancouver Hospital; Charles Bernstein, MD, University of Manitoba; William Chey, MD, D.Sc., Rochester Institute for Digestive Diseases and Sciences; Brain Feagan, MD, University of Western Ontario; Richard Fedorak, MD, University of Alberta; Michael Kamm, MD, St. Mark’s Hospital, London; Joshua Korzenik, MD, Washington University School of Medicine; Bret Lashner, MD, Cleveland Clinic Foundation; Jane Onken, MD, Duke University; Daniel Rachmilewitz, MD, Tel Aviv Sourasky Medical Center; Paul Rutgeerts, MD, PhD, University Hospital Leuven, Belgium; Gary Wild, MD, PhD, Montreal General Hospital; and Douglas Wolf, MD, Atlanta Gastroenterology Associates. Co-authors from Centocor are Paul Masters, Susan Travers, MD, and Marion Blank, PhD.

There isn’t a physician who hasn’t at least one “Case to Remember” in his career.

Share that case with your fellow gastroenterologists.

Send it to Editor: Practical Gastroenterology, 99B Main Street, Westhampton Beach, NY 11978. Include any appropriate illustrations. Also, include a photo of yourself.
Five-Way Crossover Study of PPIs in GERD

A randomized open label comparative five-way crossover study evaluated the 24 hours intragastric pH profile of oral esomeprazole 40 mg, lansoprazole 30 mg, omeprazole 20 mg, pantoprazole 40 mg, and rebeprazole 20mg q.d. in 34 *Helicobacter pylori*-negative patients, age 18 to 60 years, with symptoms of gastroesophageal reflux disease.

The study drug was taken on five consecutive mornings, 30 minutes prior to a standardized breakfast. A washout period of at least 10 days separated each treatment phase.

Thirty-four patients provided valuable data for all five comparators. On day 5, intragastric pH was maintained above 4, with a mean of 14 hours with esomeprazole, 12.1 hours with rebeprazole, 11 hours with omeprazole, 11.5 hours with lansoprazole and 10.1 hours with pansoprazole. Esomeprazole also provided a significantly higher percentage of patients with an intragastric pH greater than 4 for more than 12 hours, relative to the other proton pump inhibitors. The frequency of adverse effects were similar between treatment groups.

It is noted that the study did not investigate the effects of the five PPIs on any clinical end points.

It was concluded that Esomeprazole at a standard dose of 40 mg q.d. provided more effective control of gastric acid in a steady state than standard doses of the other listed PPIs in patients with symptoms of gastroesophageal reflux disease. (Miner P, Katz PO, Chen Y, SuslekJ. “Gastric Acid Control with Esomeprazole, Lansoprazole, Omeprazole, Pantoprazole and Rebeprazole: A Five-Way Crossover Study.” *Amer J Gastroenterol*, 2003; 98, 2616-2620.)

Endoscopic Ultrasound-Guided Fine Needle Biopsy For Pancreatic Cancer

One hundred and fifty-eight patients at a mean age of 62.3 years underwent EUS-FNA. The mean tumor size was 32 × 26 mm. The median number of passes was three (1 to 10). Of these patients, 44 percent had at least one failed attempt at tissue diagnosis before EUS-FNA. The value of the procedure was assessed. Immediate self-limited complications occurred in 10 of the 158 evaluations (6.3 percent). Twenty-two percent reported at least one symptom, all of which were minor, except in three cases, with a self-limited acute pancreatitis, and two emergency room visits, one of which led to admission. In all, 83 patients were contacted at 30 days and 82 percent responded, with no additional or continued complications.

The sensitivity, specificity, positive predictive value, negative predictive value and accuracy of the procedure were 84.3 percent, 97.0 percent, 99 percent, 64 percent and 84 percent, respectively.

It was concluded that EUS-FNA is highly accurate in identifying patients with suspected pancreatic cancer, especially when other modalities have failed. Major complications with this procedure are rare and minor complications were similar to those reported for upper endoscopy. (Eloubeidi MA, Chen VK, Eltoum IA, et al. “Endoscopic Ultrasound-Guided Fine Needle Aspiration Biopsy of Patients with Suspected Pancreatic Cancer: Diagnostic Accuracy and Acute and 30 Day Complications.” *Amer J Gastroenterol*, 2003; 98, 2653-2668.)

Ed. Note: The negative predictive value is, of course, the limiting factor.

Smoking and Colorectal Neoplasia

Data was collected from the charts of 1,988 screening colonoscopy patients, including colonic findings, histology, risk factors for colorectal neoplasia and smoking pattern. Current smokers were defined as those who had smoked more than 10 pack-years and were currently smoking or who had quit within the past 10 years. Outcomes were any adenomatous lesions and significant colonic neoplasia, which included adenocarcinoma, high grade dysplasia, villous tissue, large adenomas and multiple adenomas.

Multivariate analysis revealed that current smokers were more likely to have any adenomatous lesions, with an odds ratio of 1.89, as well as significant neoplasia, odds ratio 2.28, than those who had never smoked. The increased risk for smokers was predominantly for left-sided neoplasia. The risk for significant neoplasia was greater for smokers than for patients, with a family history of colorectal cancer, with an odds ratio of 1.2.

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It was concluded that smoking produces a significant risk factor for colorectal neoplasia in a screening population, especially for significant left-sided lesions. In this sample population, smoking posed a greater risk than family history of colorectal cancer. (Anderson JC, Attam R, Alpern Z, et al. “Prevalence of Colorectal Neoplasia in Smokers.” Amer J Gastroenterol, 2003; 98, 2777-2783.)

Treatment For Episodic Type C Hepatic Encephalopathy

Eighteen patients with grade II to IV acute hepatic encephalopathy complicating HCV infection with cirrhosis, failing to respond to at least 24 hours of medical therapy, underwent a maximum of 3 six-hour charcoal-based hemodiabsorption treatments in a liver dialysis unit. Therapy was terminated if patients met a predetermined clinical response, deteriorated or underwent transplantation.

A mean of 1.6 treatments was applied. Sixteen patients (88.9 percent) improved to less than grade II hepatic encephalopathy, or achieved at least a 50 percent hepatic encephalopathy index reduction. Survival was 94.4 percent and 72.2 percent at 5 and 30 days, respectively.

It was concluded that charcoal-based hemodiabsorption treatments in which a standardized anticoagulation protocol is used is a safe and effective treatment for acute hepatic encephalopathy, not responding to standard medical therapy. (Hill K, Hu K, Cottrell A, Teichman S, Hillebrand DJ. “Charcoal-Based Hemodiabsorption Liver Support For Episodic Type C Hepatic Encephalopathy.” Amer J Gastroenterol, 2003; 98, 2763-2770.)

Pioglitazone in NASH

Eighteen nondiabetic patients with biopsy-proven NASH were treated with Pioglitazone 30 mg q.d. for 48 weeks. Tests of insulin sensitivity and body composition, as well as liver biopsies were performed before and at the end of treatment. By 48 weeks, ALT values fell to normal in 72 percent of patients. Hepatic fat content and size as determined by magnetic resonance imaging decreased, and glucose and free fatty acid sensitivity to insulin were uniformly improved.

Histologic features of steatosis, cellular injury, parenchymal inflammation, Mallory bodies, and fibrosis were significantly improved from baseline. Histologic improvement occurred in 2/3 of patients. Pioglitazone was well tolerated. The main side effects were weight gain (averaging 4% gross) and an increase in total body adiposity.

It was concluded that these results indicate that treatment with an insulin-sensitizing agent can lead to improvement in biochemical and histological features of NASH and support the role of insulin resistance in the pathogenesis of this disease. However, the long-term safety and benefits of this drug require further study. (Promrat K, Lutchman G, Uwaifo GI, et al. “A Pilot Study of Pioglitazone Treatment For Nonalcoholic Steatohepatitis.” Hepatology, 2004; Vol. 39, pp. 186-196.)

Endoscopic Ultrasound in Portal Venous Thrombosis

A retrospective analysis of patient studies was carried out to determine the sensitivity and specificity of endoscopic ultrasound in 16 patients with portal venous system thrombosis and 29 patients without PVST as proven by surgery and/or CT scanning. All patients underwent a linear EUS examination of the portal venous system. The resensitivity of EUS for the findings of PVST was 81 percent in 13 of 16 patients, and the specificity was 93 percent in 27 of 29 patients, with an overall accuracy of 89 percent. In an additional group of 11 patients, EUS demonstrated the presence of PVST that was not detected by CT scanning.

It was concluded that linear SUS is a high sensitive and specific test for PVST. (Lai L, Brugge WR. “Endoscopic Ultrasound is a Sensitive and Specific Test to Diagnose Portal Venous System Thrombosis (PVST).” Amer J Gastro, 2004; Vol. 99, No. 1., pp. 40–44.)

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