Osawaru Omoruyi, MD, and Keith B. Holten, MD
Clinton Memorial Hospital/ University of Cincinnati Family Practice Residency, Wilmington, Ohio

How should we manage GERD?

- **Are proton pump inhibitors (PPIs) more effective than histamine type 2 receptor antagonists (H2RAs) for the treatment of gastroesophageal reflux disorder (GERD)?**
- **Do all PPIs relieve heartburn symptoms equally?**
- **What is the role of fundoplication in the management of severe GERD?**

The answers to these clinical questions can be found in a clinical effectiveness review that compares the medical, surgical, and endoscopic treatments for GERD. It was prepared for the Agency for Healthcare Research and Quality (AHRQ) by Tufts–New England Medical Center's Evidence-Based Practice Center. AHRQ began funding these clinical effectiveness reviews in 2005 to provide valid evidence about the comparative effectiveness of medical interventions to treat common health problems. Their objective is to provide resources to assist consumers and healthcare providers to make informed choices among treatment alternatives. The evidence category for this effectiveness review was management. The patient population was limited to adults. The evidence rating is updated to comply with the SORT taxonomy.[1]

Practice recommendations

GRADE A RECOMMENDATIONS

- PPIs are superior to H2RAs for the resolution of GERD symptoms at 4 weeks and the healing of esophagitis at 8 weeks.
- There is no difference in relief of symptoms at 8 weeks between omeprazole, lansoprazole, pantoprazole, and rabeprazole.

GRADE B RECOMMENDATIONS

- Laparoscopic fundoplication is as effective as open fundoplication for relieving heartburn and regurgitation, improving quality of life, and decreasing the use of antisecretory medications.
- Medical treatment was as effective as fundoplication for relief of GERD symptoms and decreasing esophageal acid exposure, at least for up to 2 years of follow-up.
- Laparoscopic techniques yielded better patient satisfaction compared with endoscopic treatments.

GRADE C RECOMMENDATION

- Patients with psychiatric disorders, when treated surgically, have less symptom improvement and worse satisfaction outcomes.

CORRESPONDENCE
Keith B. Holten, MD, 825 Locust Street, Wilmington, OH 45177. E-mail: keholtenmd@cmhregional.com

Guideline relevance and limitations

GERD is defined as weekly heartburn or acid regurgitation. It is one of the most common medical problems encountered by primary care physicians. In the year 2000, direct costs for treating GERD was estimated at $10 billion for patients with chronic GERD. Goals of therapy are to improve heartburn symptoms and quality of life, heal esophagitis, maintain healing, and prevent complications (Barrett's esophagus, esophageal stricture formation, or esophageal adenocarcinoma).

The review considered comparison of medical treatments to surgery, comparison of surgery with endoscopic procedures, comparison of medical treatments with endoscopic procedures, comparison of medical treatments (between classes and within class), comparison of surgical techniques (open and laparoscopic), comparison of endoscopic treatment with sham, patient characteristics associated with outcomes of medical, surgical, and endoscopic treatments, and adverse events associated with medical, surgical, and endoscopic treatments.

Medical treatments considered were intermittent, periodic, or continuous use of prescription or over-the-counter medications, H2RAs, and PPIs. Surgical therapy included fundoplication. The review is weakened by inconsistent reference points in the scale of defining severity.

Guideline development and evidence review

The guideline was formulated by Tufts–New England Medical Center's Evidence-Based Practice Center. Evidence was selected by searching Medline, EmBase, and Cochrane databases. A critical appraisal was performed and recommendations were graded. The review was released in December 2005.

Source for this guideline

Ip S, Bonis P, Tatsioni A, et al. Comparative effectiveness of management strategies for gastroesophageal reflux disease. Evidence Report/Technology Assessment No. 1. (Prepared by Tufts–New England Medical Center Evidence-Based Practice Center under Contract No. 290-02-0022.) Rockville, Md: Agency for Healthcare Research and Quality. December 2005. Available at: effectivehealthcare.ahrq.gov/synthesize/reports/final.cfm?Document=2&Topic=30. Accessed on April 18, 2006.

Other guidelines on GERD

Guideline for the management of dyspepsia

This 2005 guideline considers indications for EGD and 2 treatment options for functional dyspepsia: testing and eradication of *Helicobacter pylori* infection or empiric trial of acid suppression with a PPI for 4 to 8 weeks.

Source. Talley NJ, Vakil N, and the Practice Parameters Committee of the American College of Gastroenterology. Guidelines for the management of dyspepsia. *Am J Gastroenterology* 2005; 100:2324–2337 Available at: www.acg.gi.org/physicians/guidelines/dyspepsia.pdf. Accessed on April 18, 2006.

Updated guidelines for the diagnosis and treatment of gastroesophageal reflux disease

This recent guideline reviews diagnosis (endoscopy, ambulatory reflux monitoring, and esophageal manometry) and treatment of GERD (including lifestyle changes and pro-motility agents). The literature review is less rigorous than the AHRQ clinical effectiveness review.

Source. DeVault KR, Castell DO. Updated guidelines for the diagnosis and treatment of gastroesophageal reflux disease. *Am J Gastroenterol* 2005; 100:190–200. Available at: www.acg.gi.org/physicians/guidelines/GERDTreatment.pdf. Accessed on April 18, 2006.

REFERENCE

1. Ebell M, Siwek J, Weiss BD, et al. Strength of recommendation taxonomy (SORT): A patient-centered approach to grading evidence in the medical literature. *J Fam Pract* 2004; 53:111–120.

FAST TRACK

PPIs are superior to H2RAs in resolution of GERD symptoms at 4 weeks