THE EFFECTIVE PHYSICIAN—

Gastroesophageal Reflux Disease, 2005 Update

BY WILLIAM E. GOLDEN, M.D., AND ROBERT H. HOPKINS, M.D.

Background

The American College of Gastroenterology produced initial guidelines for the evaluation and management of gastroesophageal reflux disease in 1995; an update of these guidelines based on recent literature was published early this year.

Conclusions

For the diagnosis of gastroesophageal reflux disease (GERD), ambulatory pH monitoring is considered the most specific method, but the combination of symptoms and endoscopic findings is also very accurate, with about 97% specificity.

Barium radiography is not recommended for diagnosis of GERD. Its accuracy is nearly 80% in patients with severe esophagitis; however, the presence of hiatal hernia, reflux of barium into the esophagus, and reticular barium patterns are neither highly sensitive nor highly specific.

Although endoscopy showing clear signs of Barrett's esophagus or esophagitis confirms GERD, a normal endoscopy does not exclude its presence. Most symptomatic patients with GERD will have normal results on endoscopy.

Despite use of the most effective therapy for GERD, some patients will continue to reflux acid into the esophagus.

Patients who have symptoms of GERD for more than 10 years are reported to have an odds ratio for Barrett's esophagus of 6.4, compared with patients whose symptoms have lasted less than 1 year.

However, recent reports have challenged the usefulness of symptom severity and duration in predicting the presence of Barrett's epithelium changes.

Implementation

Empiric therapy for GERD consisting of lifestyle modifications and acid suppression with high-dose proton pump inhibitor (PPI) medication is a reasonable initial approach to patients with uncomplicated reflux.

Upper GI endoscopy is warranted in patients who present with GERD and "alarm symptoms" (dysphagia, odinophagia, weight loss, bleeding, or anemia), which may suggest potential complications such as peptic stricture and esophagitis. Endoscopy is also warranted in patients with symptoms of a duration sufficient to raise the suspicion of Barrett's esophagus.

Higher degrees of esophagitis found on endoscopy are more difficult to heal initially and may require longer duration of therapy with more potent acid suppression.

Symptomatic patients with GERD—with or without esophagitis by endoscopy—require similar levels of chronic acid suppression to control symptoms and reduce acid reflux into the esophagus. Current data on efficacy and safety support continuous PPI therapy as the most effective medical intervention for GERD.

Promotility agents may be useful adjuncts to acid suppression in selected patients. Metoclopramide and bethanechol are not used frequently due to central nervous system side effects; tegaserod and baclofen are being studied.

Ambulatory pH monitoring may be useful in evaluating esophageal acid exposure in pa-

tients with refractory symptoms despite maximal therapy and prior to considering reflux surgery. Current usage is limited by patient discomfort and concerns regarding accuracy. Newer methods are currently under evaluation, which may address many of these concerns.

Maintenance medication requirements for GERD will vary between patients, but studies on the use of full-dose histamine-2 receptor blockers once daily and reduced doses of PPI have shown them to be ineffective. Full-dose PPIs have been shown to reduce symptomatic recurrences. There are no data to demonstrate that acid suppression will prevent the development of, or progression of, Barrett's esophagus and/or peptic esophageal strictures.

Antireflux surgery by an experienced surgeon may be a maintenance option in some patients. The best predictors of a good outcome from reflux surgery are age less than 50 years and typical reflux symptoms that resolve completely on medical therapy. Fewer data are available on benefits in patients who have reflux that is refractory to medical therapy.

Laparoscopic reflux surgery is associated with lower morbidity and cost, compared with open surgery, but studies have shown higher rates of postoperative flatulence, dysphagia, eructation, and diarrhea.

Endoscopic therapies using radiofrequency application, endoscopic sewing of the lower esophageal sphincter area, and injection of a polymer in the area of the sphincter have been studied. Trials have demonstrated short-term benefits, but systematic reviews of all three techniques have not identified clear indications for their use. These methodologies may be useful in selected patients with documented GERD responsive to PPIs, but they have not been studied adequately in patients refractory to medical therapy.

Patients with GERD that does not respond to lifestyle modifications and traditional, approved doses of PPIs should be assessed for other causes for their symptoms. If GERD is confirmed, treatment with a PPI at a higher than approved dose and/or b.i.d. dosing may be effective.

Reference

DeVault K.R. and Castell D.O.: Updated guidelines for the diagnosis and treatment of gastroesophageal reflux disease. Am. J. Gastroenterol. 2005;100:190-200.



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Staging Stomach Ca via Ultrasound Takes Hit

BY PATRICE WENDLING

Chicago Bureau

ATLANTA — Endoscopic ultrasound may not be as accurate a diagnostic tool for preoperative staging of gastric cancer as currently thought, a new study suggests.

Findings from preoperative endoscopic ultrasound (EUS) had a lower-than-expected concordance with those from postoperative pathologic assessment in a large series of patients undergoing a complete resection for gastric cancer, David J. Bentrem, M.D., reported at a symposium sponsored by the Society of Surgical Oncology.

For example, only 49% of patients with an EUS stage II lesion had a T2 lesion present on a traditional pathology report.

Overall accuracy was 57% for individual EUS T stage lesions and 50% for N stage lesions. The main reason for error was overstaging of the primary tumor, said Dr. Bentrem of Memorial Sloan-Kettering Cancer Center, New York.

The results are important because staging is used to define the eligibility of high-risk patients for neoadjuvant trials and is routinely used by clinicians to stratify risk and guide treatment planning, he said. Hence, physicians "need to know what they're getting with a test," said Dr. Bentrem.

At present, EUS remains the best test for establishing the extent of locoregional disease, Dr. Bentrem said, adding that most patients with gastric cancer undergo EUS prior to enrollment in a neoadjuvant chemotherapy protocol at Memorial Sloan-Kettering.

The findings contradict an earlier study conducted at the same institution that found preoperative EUS T stage correlated with pathologic T stage in 89% of 43 patients with gastric carcinoma (J. Clin. Oncol. 1993;11:2380-5).

As for how the results could be so disparate—particularly with more than 10 years of additional experience using EUS—Dr. Bentrem told this newspaper that the earlier study included the institution's first 50 patients who underwent EUS followed by resection, and thus there was a "higher degree of scrutiny for these first patients." The studies also had other methodologic differences.

The current study included 296 patients who underwent a preoperative clinical assessment of T and N stage with EUS and subsequent resection for gastric adenocarcinoma between 1993 and 2003. Patients who had received neoadjuvant therapy were excluded from analysis.

Of the 223 patients evaluated with EUS for T stage lesions, 127 patients (57%) were correctly staged, 25 (11%) were understaged, and 71 (32%) were overstaged.

Of the 218 patients evaluated with EUS for N stage lesions, 110 patients (50%) were correctly staged, 54 (25%) were understaged, and 54 (25%) were overstaged.

The overall accuracy of EUS for assessing the presence or absence of nodal disease was 71%.

The highest agreement between the two methods was in distinguishing high-risk patients from low-risk patients. Of the 150 patients deemed high risk or showing evidence of either serosal invasion or nodal disease on preoperative EUS, 76% were found to be high risk on traditional pathologic assessment.

EUS did not distinguish among individual T stages based on outcome, particularly between T2 and T3 lesions, Dr. Bentrem said. Many of the pathologic T2 lesions were overstaged and identified as T3 on EUS. Patients with EUS-identified T2 and T3 lesions had similar outcomes, with a median survival rate of about 36 months.

DATA WATCH **Prevacid Held Slight Lead in Proton Pump Inhibitor Sales to Retailers for 2004** Prevacid \$3.80 \$3.78 **Nexium** \$2.33 **Protonix** \$1.33 **Aciphex** Sales in billions \$0.64 **Omeprazole** of dollars Note: Based on purchases, at wholesale prices, by retailers of prescription drugs. Total U.S. sales for proton pump inhibitor class were \$12.5 billion. Source: IMS Health