

Which patients with gastroesophageal reflux disease (GERD) should have esophagogastroduodenoscopy (EGD)?

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■ EVIDENCE-BASED ANSWER

No evidence was identified that provides a basis for determining whether EGD leads to improved outcomes in patients with GERD. However, patients with GERD referred for elective EGD who were found to have Barrett's esophagus were more likely to have symptoms for more than 1 year than patients who did not have Barrett's esophagus. Patients with esophageal adenocarcinoma were more likely to have frequent, severe, or longer duration of GERD symptoms. The calculated odds ratios (OR) for esophageal adenocarcinoma increased with increasing frequency, severity, or duration of GERD symptoms, independently or in combination.

■ EVIDENCE SUMMARY

A total of 701 patients referred for EGD by gastroenterologists for GERD symptoms yielded 77 cases of Barrett's esophagus. Compared with patients without Barrett's esophagus, patients with the condition were more likely to have symptoms greater than 1 year: 1 to 5 years (OR=3.0 [95% confidence interval (CI), 1.2-8.0]), 5 to 10 years [OR=5.1 (95% CI, 1.2-14.7)], more than 10 years [OR=6.4 (95% CI, 2.4-17.10)].¹

A case control study conducted at Duke University compared 79 patients with Barrett's esophagus with 2 control groups: patients undergoing endoscopy for GERD symptoms and patients undergoing endoscopy for other indications. Patients with Barrett's esophagus developed symptoms at an earlier age (mean age = 35.3 years ± 16 years compared with 43.7 years ± 13 years and 42.7 years ± 13 years, respectively) and had a longer duration of symptoms (mean duration = 16.36 years [range = 1-63 years] compared with 11.81 years [range = 1-55 years] and 13.03 years [range = 1-53 years]) than patients without Barrett's esophagus.

A Swedish case-controlled study compared 189 cases of esophageal adenocarcinoma and 167 cases of squamous cell carcinoma with 820 control subjects recruited from the general population. Patients with esophageal adenocarcinoma were 7.7 times more likely to report symptoms of GERD at least once weekly 5 years before their diagnosis with adenocarcinoma. Other ORs are as follows: symptoms once per week (5.1), symptoms more than 3 times per week (16.7), nocturnal symptoms at least once per week (10.8), and duration more than 20 years (16.4).³ Also, obesity was a risk factor for esophageal adenocarcinoma in this population. Patients with a body mass index (BMI) greater than 30 had increased risk of adenocarcinoma compared with patients with a BMI less than 25 (OR=16.2; 95% CI, 6.3-41.4).⁴ These authors calculated numbers of endoscopies needed to detect 1 case of esophageal adenocarcinoma. Among Swedish men aged 50 to 79

years with symptoms at least 1 time per week and BMI greater than 30, 594 endoscopies (95% CI, 385-972) are needed to find 1 case of esophageal adenocarcinoma.⁵ These authors estimate incidence of adenocarcinoma using population-wide surveillance data.

There is no current evidence that evaluation of GERD patients with EGD improves outcomes, although 2 retrospective studies have shown improved outcomes for patients with Barrett's esophagus undergoing surveillance endoscopy compared with those without surveillance.^{6,7}

■ RECOMMENDATIONS FROM OTHERS

The American College of Gastroenterology recommends EGD for GERD patients who do not respond to therapy, experience alarm symptoms, who have chronic symptoms and are at risk for Barrett's esophagus, and need continuous chronic therapy.⁸

The Alberta (Canada) clinical practice guideline recommends EGD for GERD patients with alarm symptoms or failure to respond to 4 to 8 weeks of therapy with a proton pump inhibitor.⁹

CLINICAL COMMENTARY

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Indigestion is a very common gastrointestinal symptom. The majority of the time, it is related to GERD. For young to middle-aged patients who appear to be healthy, lifestyle modifications and antacids or H2-blockers will usually provide relief of their symptoms. A lack of response to these interventions or the development of other gastrointestinal symptoms may imply a more significant disease process or a different diagnosis. In addition to the alarm symptoms provided in TABLE 1, I also become more concerned if patients have tobacco or alcohol problems, or require chronic proton pump inhibitor therapy (>12 weeks) to control their symptoms. Upper endoscopy is a useful tool to confirm a diagnosis in this small subset of patients.

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