

American Gastroenterological Association Medical Position Statement: Evaluation of Dyspepsia

This document presents the official recommendations of the American Gastroenterological Association (AGA) on Evaluation of Dyspepsia. It was approved by the Clinical Practice and Economics Committee on April 22, 2005, and by the AGA Governing Board on October 6, 2005.

Since the publication of the initial technical review on evaluation of dyspepsia in 1998,¹ there has been a substantial accumulation of new evidence and a continued decrease in the incidence of distal gastric adenocarcinoma and the prevalence of *Helicobacter pylori* in North America.² The current recommendations are based on a comprehensive review of the literature to identify relevant diagnostic and observational studies as well as randomized controlled trials that updated existing Cochrane systematic reviews.³

Differential Diagnosis of Dyspepsia

Dyspepsia refers to chronic or recurrent pain or discomfort centered in the upper abdomen.³ Patients with predominant or frequent (occurring more than once a week) heartburn or acid regurgitation are considered to have gastroesophageal reflux disease (GERD) until proven otherwise and are not part of the definition of dyspepsia (Figure 1). It is, however, recognized that there is considerable symptom overlap and it is often difficult to distinguish between dyspepsia and GERD in the uninvestigated patient with upper gastrointestinal symptoms in primary care.^{4,5} Further research into the most appropriate definition of dyspepsia in uninvestigated patients in primary and secondary care is recommended.

Peptic ulcer is responsible for approximately 10% of upper gastrointestinal symptoms; most patients with dyspepsia undergoing endoscopy are found to have functional dyspepsia.^{3,6} More than 50% of patients with GERD will not have any evidence of esophagitis at upper gastrointestinal endoscopy, so this condition can be confused with functional dyspepsia.³ *H pylori* is the main cause of peptic ulcers not associated with nonsteroidal anti-inflammatory drugs (NSAIDs) and also causes functional dyspepsia in a small proportion of cases.⁷

Management Options for New-Onset Dyspepsia

The main strategies for managing new-onset dyspepsia are (1) empirical H₂-receptor antagonist therapy,

(2) empirical proton pump inhibitor (PPI) therapy, (3) *H pylori* testing and treatment of positive cases (*H pylori* test and treat) followed by acid suppression if the patient remains symptomatic, (4) early endoscopy alone, (5) early endoscopy with biopsy for *H pylori* and treatment if positive, (6) acid suppression followed by endoscopy and biopsy if the patient remains symptomatic, or (7) *H pylori* test and treat with endoscopy if the patient remains symptomatic.

Management Recommendations

Patients 55 years of age or younger without alarm features should receive *H pylori* test and treat followed by acid suppression if symptoms remain (Figure 2).³ *H pylori* testing is optimally performed by a ¹³C-urea breath test or stool antigen test. PPIs are the drug class of choice for acid suppression.³ Those who are *H pylori* negative should be prescribed an empirical trial of acid suppression with a PPI for 4–8 weeks. Empirical PPI therapy is the most cost-effective approach in populations with a low prevalence of *H pylori* (10% or less). The recommendation to test and treat is based on randomized controlled trials⁸ and the possible impact of eradication in preventing future gastric adenocarcinoma.³

Patients who respond to *H pylori* test and treat or PPI therapy can be managed without further investigation.³ Endoscopy usually adds little in young patients who continue to have upper gastrointestinal symptoms without alarm features despite *H pylori* test and treat and PPI therapy. There is a very low probability of finding relevant organic disease in this group of patients. Endoscopy may reassure some young patients with continued symptoms, but evidence suggests this is not the case in those who are most anxious⁹ and that many *H pylori* test-and-treat patients can be managed in the long term without further investigation.¹⁰ Endoscopy may be appropriate

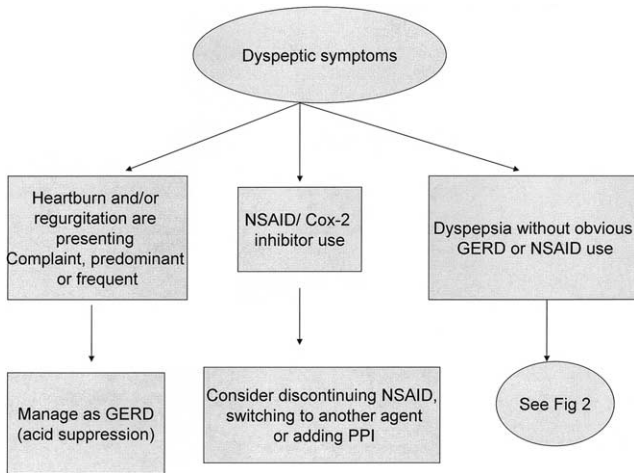


Figure 1. Initial management of dyspepsia. COX, cyclooxygenase.

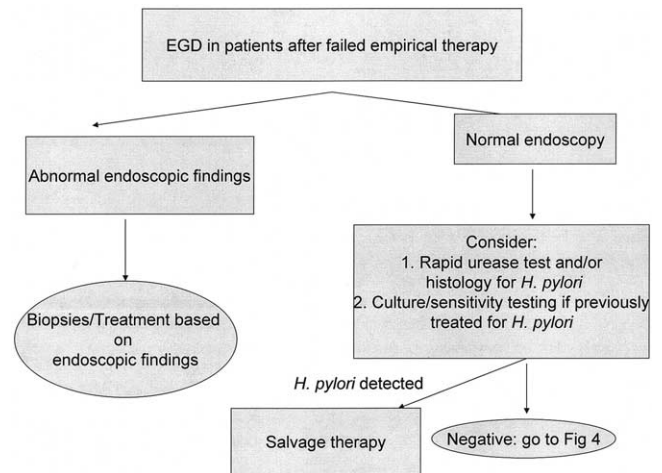


Figure 3. Endoscopy in patients who have failed empirical therapy. EGD, esophagogastroduodenoscopy.

for some young patients who continue to have dyspepsia, but this should be considered in the wider context of reevaluating the symptoms and the diagnosis. Endoscopy appears not to be a cost-effective use of resources compared with alternatives such as screening for colorectal cancer¹¹ (Figure 3).

The value of alarm symptoms in younger patients is controversial.¹² A systematic review of alarm symptoms suggests that these are not very useful in diagnosing upper gastrointestinal malignancy.³ However, although the yield of endoscopy is low, it is recommended for patients older than 55 years of age and for younger patients with alarm features (eg, weight loss, progressive dysphagia, recurrent vomiting, evidence of gastrointestinal bleeding, or family history of cancer) presenting with new-onset dyspepsia. Upper gastrointestinal malignancy becomes more common after age 55 years.³ Biopsy specimens should be obtained for *H pylori* at the time of

endoscopy and eradication therapy offered to those who are infected because this may reduce the risk of subsequent peptic ulcer disease and gastric malignancy.³ Endoscopy should be preferred over upper gastrointestinal radiography because it has greater diagnostic accuracy and biopsy specimens can be taken for *H pylori* infection. After endoscopy, and *H pylori* eradication therapy if positive, treatment should be targeted at the underlying diagnosis. Most patients will have functional dyspepsia and can be offered acid suppression therapy.¹³

Patients of any age who continue to have symptoms despite appropriate investigations, therapy, and reassurance are a difficult group to manage (Figure 4). Symptoms should be reassessed and prokinetic agents, antidepressant therapy, or psychological treatments considered, although the benefits of these approaches are not established.¹⁴⁻¹⁶

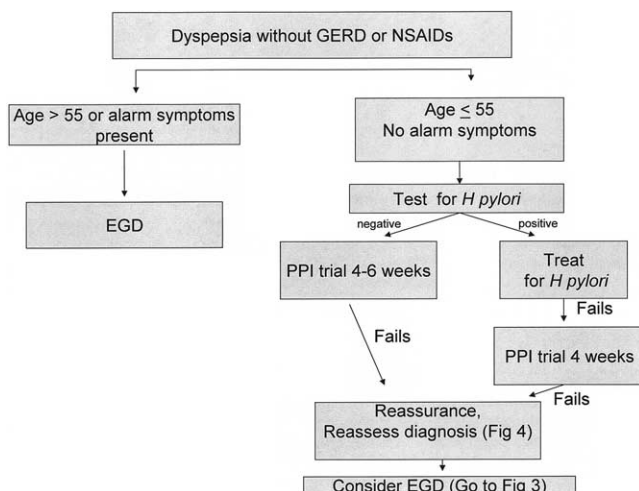


Figure 2. Management of dyspepsia based on age and alarm features. EGD, esophagogastroduodenoscopy.

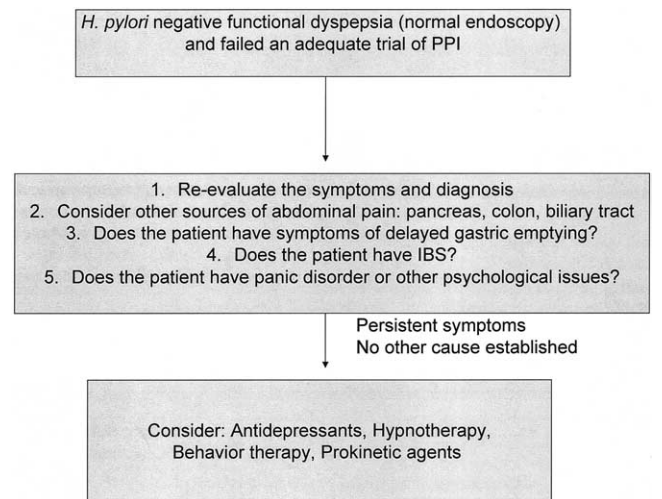


Figure 4. Management of functional dyspepsia. IBS, irritable bowel syndrome.

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The Medical Position Statements (MPS), developed under the aegis of the American Gastroenterological Association (AGA) and its Clinical Practice and Economics Committee (CPEC), were approved by the AGA Governing Board. The data used to formulate these recommendations are derived from the data available at the time of their creation and may be supplemented and updated as new information is assimilated. These recommendations are intended for adult patients, with the intent of suggesting preferred approaches to specific medical issues or problems. They are based upon the interpretation and assimilation of scientifically valid research, derived from a comprehensive review of published literature. Ideally, the intent is to provide evidence based upon prospective, randomized placebo-controlled trials; however, when this is not possible the use of experts' consensus may occur. The recommendations are intended to apply to healthcare providers of all specialties. It is important to stress that these recommendations should not be construed as a standard of care. The AGA stresses that the final decision regarding the care of the patient should be made by the physician with a focus on all aspects of the patient's current medical situation.