Reflux Symptoms: Can We Sort Them Out?

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Empirical therapy plays an important role in most algorithms and guidelines for the diagnosis and therapy of gastroesophageal reflux disease (GERD), including the most recent guidelines produced by the American College of Gastroenterology (ACG) and endorsed by the other major societies [1]. The ACG guidelines state, 'If the patient's history is typical for uncomplicated GERD, an initial trial of empirical therapy, including lifestyle modification is appropriate'. This assumes that clinicians are able to do two things: (1) determine that a history is typical for GERD, and (2) rule out GERD complications by taking that history.

It is commonly understood that the combination of heartburn and regurgitation, often made worse by large or fatty meals, recumbency or bending over, is highly suggestive of GERD. Patients who have these symptoms and also have endoscopic changes of esophagitis unquestionably have GERD [2]. The more important question is, 'are these symptoms specific for GERD in the unendoscoped patient?' A large Scandinavian study evaluated symptoms using a standardized questionnaire and abnormal pH monitoring or endoscopic changes as the gold standard. They found that a symptom assessment had a good sensitivity (92%), but very poor specificity (19%) [3]. A previous study found that the daily occurrence of heartburn or acid regurgitation only had positive predictive values of 59 and 66% compared to objective measures of pathologic reflux [4].

A therapeutic trial may be a 'diagnostic' maneuver that improves our ability to diagnose reflux without invasive testing. With regard to noncardiac chest pain, a short course of omeprazole was found to be 78% sensitive and 85% specific when compared to a gold standard of a

positive ambulatory pH study or esophagitis on endoscopy [5]. When heartburn was studied as the index symptom, 1 week of omeprazole 20 mg twice daily had a sensitivity of 75% but a specificity of only 55% [6]. The diagnosis of GERD is highly supportable in patients with suggestive symptoms that are relieved with acid suppression.

It is perhaps more important to be able to exclude complications of reflux disease if we are planning to empirically treat a patient with reflux symptoms. 'Warning symptoms' include dysphagia, chest pain and gastrointestinal bleeding. Even those symptoms are not specific. Routine reflux can cause dysphagia even without a structural lesion, while chest pain may be related to other causes in the upper abdomen and chest or may be functional. Despite the poor predictive value of warning symptoms, further investigation should be performed when they are present. The other major complication of GERD is Barrett's esophagus. The recent large population-based study from Scandinavia provided some guidance on who to investigate for Barrett's [7]. The reflux-related factors that predicted the development of adenocarcinoma of the esophagus included frequency, severity and duration. Although not proven to save lives or to be cost-effective, it has been suggested that patients with long-standing, regular symptoms of GERD who are over the age of 40–50 be screened for Barrett's esophagus and, if Barrett's is present, be entered into a surveillance program [8].

The current study evaluated yet another questionnaire's ability to predict reflux as documented by esophageal manometry, ambulatory pH testing and endoscopy [9]. Heartburn and regurgitation were predictive of

an abnormal pH test and low lower esophageal sphincter pressure on manometry. This relationship was not perfect. Only 64% of patients with an abnormal pH test had heartburn and 62% had regurgitation, while 68% of patients with a low lower esophageal sphincter pressure had heartburn and 68% had regurgitation. The only reflux complication evaluated in this study was stricture, which was predicted by a history of dysphagia. Those of us who participate in clinical trials evaluating therapies for GERD have similar experiences to this study. Despite our best history-taking skills, it is quite difficult to predict who will have an abnormal endoscopy or pH test. We do better when we accept either esophagitis or a pH test as evidence of reflux, but still find patients with an outstanding reflux history in whom we cannot document disease.

This could be due to false-negative endoscopies and pH tests, but is more likely related to the nonspecific nature of most esophageal symptoms. This is especially important when clinicians are evaluating patients for antireflux surgery. Objective evidence of reflux (esophagitis or abnormal pH testing) is mandatory prior to proceeding with antireflux surgery.

In summary, the diagnosis of GERD cannot universally be based on only symptoms nor can any one test be said to be the 'gold standard'. A carefully obtained history, therapeutic trial, ambulatory pH test, endoscopy and combinations of any (and sometimes all) of these maneuvers may be needed to confirm the diagnosis in any individual patient.

References

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