Clinical Spectrum of GERD

Gastroesophageal reflux disease (GERD) is a highly prevalent chronic disorder with clinical presentations that are on the one hand so typical to provide easy diagnosis and on the other so atypical to confound even the most astute clinician. Figure 1 portrays the variable spectrum of this disease, including the frequent presentation of intermittent heartburn without evidence of esophageal injury (i.e. esophagitis) through the so-called “atypical” manifestations of GERD to the most devastating complication of Barrett’s esophagus leading to esophageal adenocarcinoma. Although GERD is often quoted to affect approximately 20 million US adults, this figure only refers to those with typical heartburn and information concerning the frequency with which “atypical” or “extraesophageal” symptoms are produced by GERD is lacking. In addition, observations that up to 50% of patients with typical symptoms of heartburn and regurgitation show no evidence of esophageal mucosal damage on endoscopy dramatically affects the clinical approach to these individuals.

Numerous studies have confirmed the inability of the examining physician to anticipate the degree of esophagitis (or absence thereof) based on either the frequency or severity of the patient’s heartburn. Even the most astute physician should be humbled by the knowledge that he or she cannot predict whether that patient sitting in front of them complaining of heartburn has severe esophagitis or none at all. This is particularly problematic in the patient with Barrett’s esophagus where the metaplastic columnar epithelium shows decreased sensitivity to refluxed acid material, thus eliminating one’s ability to use clinical presentation to help predict the presence of this complication and control of acid reflux with treatment. These facts have been responsible for the general awareness that screening endoscopy to exclude Barrett’s esophagus should be performed in patients with chronicity of symptoms (greater than 5 years) who are over the age of 40 with particular attention to white males, irrespective of the effectiveness of therapy. In addition, as much as one would like to believe in their ability to make a diagnosis from a carefully performed history, heartburn is also not specific to the diagnosis of GERD.

The atypical manifestations of GERD present an even greater challenge to the clinician. Many patients cannot differentiate between heartburn and chest pain and will use these terms interchangeably. Others will describe a “pressure” or “constricting” sensation in the lower chest, often quite reminiscent of cardiac angina. In this group of patients precise diagnosis of GERD based on abnormal pH monitoring can lead to a greater than 80 percent success rate with PPI therapy (1). Others have reported similar success with a diagnostic/therapeutic trial of high dose PPI therapy (2).

(continued on page 16)
Clinical Spectrum of GERD

GERD IN THE 21st CENTURY

(continued from page 14)

Figure 1.

The so-called “supra-esophageal” symptoms of asthma, cough, or voice changes often defy accurate diagnosis and thus clear therapeutic options. It would be fair to indicate that abnormal esophageal acid exposure obtained during ambulatory pH testing is common in many of these patients but a clear cause and affect relationship is often difficult to confirm because of less clear response to acid suppressing therapy. Current practice would suggest that high dose (at least bid) PPI therapy for long duration (up to six months) should be considered when the diagnosis of GERD is suspected in patients of this kind. The potential for non-acid reflux to produce continuing pulmonary symptoms in patients with documented abdominal reflux patterns has been suggested by the recent report of Irwin, et al of patients responding to surgery when documented acid suppression failed (3). Modern impedance technology will more clearly identify these patients (4).

The concept of the “GERD iceberg” was developed to provide a perception regarding the distribution of these patients among specialists. The majority of patients suffering from heartburn or other potential GERD symptoms are “below the surface” and not seen by a physician and treat themselves with over-the-counter medication with variable degrees of success. Some will continue to use antacids or OTC H2 receptor antagonists for years to obtain intermittent or regular relief of their GERD symptoms. The whole perspective is likely to change dramatically with the recent availability of OTC proton pump inhibitors. Another large portion of GERD sufferers are primarily seen by primary care physicians who use the array of therapies available for this condition to establish and maintain symptom resolution in these patients. Usually, only those GERD patients with persistent symptoms or complications are seen by the gastroenterologist or gastrointestinal surgeon for evaluation and refining therapy. This concept underscores the critical importance of education regarding the nature of GERD and its treatment for all physicians who manage these patients. In addition, the need for continuing educational programs for patients with GERD symptoms who self-medicate becomes apparent from the recognition of the “submerged” portion of the GERD iceberg, including that group with minimally symptomatic Barrett’s esophagus. Recognition and proper management of the complications of this disease requires proper evaluation of all GERD patients.

Figure 2.

References