

# ADVANCES IN GERD

Current Developments in the Management of Acid-Related GI Disorders

Section Editor: Joel E. Richter, MD

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## ENT Symptoms of GERD

Michael Vaezi, MD, PhD  
Professor of Medicine  
Vanderbilt University School of Medicine

### **G&H** Why does gastroesophageal reflux disease cause throat symptoms?

**MV** Normally, reflux of gastric content enters the esophagus, with heartburn or chest discomfort as associated symptoms. Atypically, reflux enters the larynx and irritates the area, causing swelling, edema, or possibly polyps or granulomas in the larynx or vocal cords. The symptoms are driven by the abnormal exposure of the larynx to reflux.

### **G&H** What is the typical way in which patients with ear, nose, and throat symptoms are brought to a diagnosis of gastroesophageal reflux disease?

**MV** Currently, a patient with chronic throat symptoms, including sore throat, hoarseness, throat clearing, and globus sensation, presents to their primary care physician and is referred to an ear, nose, and throat (ENT) specialist in order to identify the cause of these symptoms. Once referred to the ENT specialist, patients typically undergo a laryngoscopy and, based on the laryngoscopic findings, the condition may be diagnosed as laryngopharyngeal reflux (LPR, also known as reflux laryngitis), extra-esophageal reflux, or gastroesophageal reflux disease (GERD)-related laryngitis.

### **G&H** What is problematic about this approach?

**MV** The main problem with this approach is that these signs are not specific. The chronic throat symptoms with which a patient presents may be due to something other than GERD and the laryngeal findings are not specific enough to determine the cause definitively. No currently existing tests are 100% specific for diagnosing LPR. The physician may suspect GERD based on the laryngoscopic

findings and redness or swelling in the throat. However, some patients who present with redness and swelling are incorrectly diagnosed as having GERD.

Patients who are correctly diagnosed as having GERD will most likely respond to treatment with empiric therapy with proton pump inhibitors (PPIs). Patients who are incorrectly diagnosed with GERD may not respond to treatment, and these patients are then referred to gastroenterologists. The gastroenterologist will conduct pH or impedance monitoring, tests that are also not 100% accurate. Oftentimes the results of these tests are normal in individuals who have been diagnosed with GERD but have not responded to treatment.

In a patient whose throat symptoms persist despite twice-per-day treatment with PPIs, what is the diagnosis? Among gastroenterologists, the current thinking is that another etiology needs to be identified. However, many ENT specialists insist that continued redness is very likely due to reflux. Thus, the issue of how to diagnose and treat patients with ENT symptoms who do not respond to PPIs is a controversial one.

### **G&H** What are other possible etiologies of such persistent ENT symptoms, if not GERD?

**MV** It could be that some of the patients who do not respond to PPI therapy have nonacid reflux. PPIs suppress acid but would not affect nonacid reflux. New impedance pH monitoring devices enable physicians to determine whether, over a 24-hour period, an individual is experiencing abnormal nonacid reflux. Recent studies suggest that 20–30% of patients with ENT symptoms who do not respond to PPI therapy may have nonacid reflux in their esophagus.

However, it is not clear from these studies whether the presence of nonacid reflux is actually the cause of the irritated larynx. Impedance monitoring tests reveal whether there is abnormal nonacid reflux, but do not establish causality. How a patient whose impedance test is abnormal should be treated is not clear. The next step may be fundoplication, but it is not clear whether that is always appropriate.

### **G&H** Do these patients respond to surgery?

**MV** Studies from our group, soon to be published in *Clinical Gastroenterology and Hepatology*, demonstrate that the likelihood of patients who do not respond to PPIs responding to surgery is minimal. Patients who do not benefit from PPIs are even less likely to benefit from surgery. The only group that does appear to benefit from surgery is those with abnormal nonacid reflux.

Thus, surgery is generally recommended for patients for whom there is strong objective evidence that acid or nonacid reflux is the cause of the ENT symptoms.

### **G&H** Could you summarize the current recommendations on how to treat patients presenting with ENT symptoms thought to be associated with GERD?

**MV** The current recommendation is that patients suspected of having reflux laryngitis should be treated aggressively with twice-per-day PPIs for at least 2 months. If the patient improves, the medication can be decreased to once per day. If the patient does not improve, then the likelihood that acid reflux is the cause of the ENT symptoms is low. This subgroup may benefit from impedance pH monitoring in order to determine whether nonacid reflux might be the underlying cause of the ENT symptoms. In the subgroup of patients whose impedance pH test is abnormal, surgery may be beneficial, but this remains to be proven.

### **G&H** Are studies ongoing to confirm the benefit of surgery for patients with nonacid reflux?

**MV** Yes. Our group is conducting small studies, and Dr. Castell's group is also investigating this question. However, the results of these studies are still pending and have not yet been peer reviewed.

### **G&H** Is it possible that GERD is being over- or underdiagnosed in patients presenting with ENT symptoms?

**MV** Most likely, GERD is overdiagnosed in some groups and underdiagnosed in others. Redness in the larynx is not necessarily due to GERD. However, from the primary care perspective, patients with globus or other atypical symptoms may have underlying reflux that is not being properly diagnosed.

### **G&H** Is endoscopy recommended for patients presenting with ENT symptoms?

**MV** Upper GI endoscopy is often performed in this group of patients but the most common finding is a nor-

mal test. This further complicates the diagnostic dilemma in this patient group.

### **G&H** How common is nonacid reflux, and how commonly does it cause ENT symptoms?

**MV** Nonacid reflux usually is mixed with acidic reflux in patients who are not on acid suppressive therapy. However, in those on therapy, the predominant reflux pattern is nonacid reflux. The problem is how to link this nonacid reflux to a patient's ENT symptoms or laryngeal findings. Future studies in this field will help clarify this issue.

### **G&H** Besides the throat symptoms you mentioned, are there other ENT symptoms associated with GERD?

**MV** The common throat or ENT symptoms associated with GERD are hoarseness, sore or burning throat, globus, throat clearing, and dysphagia. Some also believe patients with postnasal drip or sinusitis may have GERD as the cause.

### **G&H** What is the prevalence of esophagitis among patients presenting with GERD-related ENT symptoms? How are these patients treated?

**MV** The prevalence of esophageal mucosal injury is low in this group. Typically about 20% of patients have esophagitis, which responds well to treatment with acid suppressive therapy.

### **G&H** Are tests being developed to more accurately identify whether ENT symptoms are being caused by GERD?

**MV** There are many centers, including ours, involved in better diagnosing and treating this difficult group of patients.

### **Suggested Reading**

Malfertheiner P, Hallerback B. Clinical manifestations and complications of gastroesophageal reflux disease (GERD). *Int J Clin Pract.* 2005;59:346-355.

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