

“Atypical” Reflux Symptoms: How a simple cough may be just the tip of the iceberg.....

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Gastroesophageal reflux disease (GERD) is a common phenomenon which most often presents with symptoms of heartburn and regurgitation. These “typical” reflux symptoms are experienced on a daily basis by seven percent of the U.S. population and on a monthly basis by 40 percent. However, many of the symptoms of reflux are “atypical”—that is, they reflect the effects of GERD on the lungs and other organs outside the digestive tract. These symptoms include asthma, chronic cough, laryngitis and non-cardiac chest pain. Special diagnostic tests are often needed to diagnose atypical reflux manifestations in order to allow proper therapy.

Between 50-80 percent of all adult-onset asthma is caused by GERD. However, only about half of asthmatics with reflux complain of heartburn. Asthma is caused by spasm of the bronchioles, the tubes that carry air into the lungs. This spasm can, in turn, be caused by either micro-aspiration (inhalation of minute amounts of stomach contents) or direct spasm induced by a reflex involving the vagus nerve. Patients who have reflux-related asthma often give a history of having asthma attacks at night, when they are lying down in bed, or after the ingestion of a large meal. The onset of asthma during adulthood is yet another clue. While reflux-associated asthmatics may respond to anti-reflux therapy (i.e. with acid-blocking agents), some do not respond to this sort of therapy and may require surgery.

Chronic cough (defined as a cough with a duration of greater than three weeks) is associated with GERD in approximately one-fifth of all cases. In fact, cough may be the sole manifestation of GERD in up to 50 percent of patients. GERD-associated cough is usually non-productive and may occur after eating; it is frequently noted to be present during the day. GERD-related cough should be suspected in nonsmokers with normal chest X-ray findings

who have no other cause for a long-standing cough.

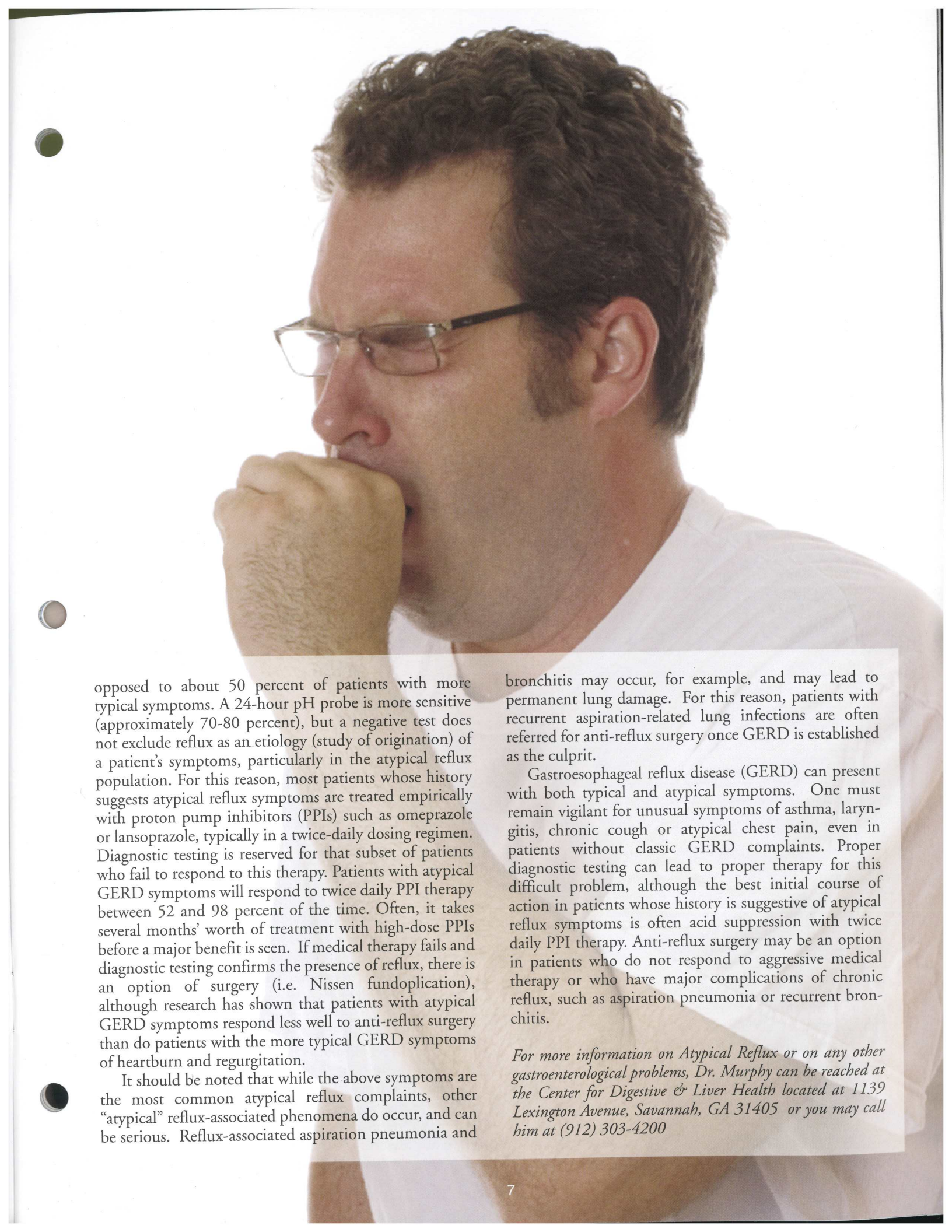
GERD is the major underlying cause of many cases of atypical non-cardiac chest pain, accounting for up to 55 percent of patients with chest pain complaints with negative cardiac catheterization findings. GERD-related chest pain is often associated with esophageal spasm, and may be clinically indistinguishable from cardiac chest pain, with radiation into the shoulders, back and neck. It is often worse after meals, frequently awakens patients from sleep, and may last from minutes to hours. It is typically not associated with exertion, which can help to distinguish it from cardiac chest pain. However, it is important to exclude a cardiac etiology before assuming that GERD may be the cause of any chest pain syndrome. Interestingly, about 20 percent of patients with atypical non-cardiac chest pain associated with GERD will have no heartburn or regurgitation symptoms.

Laryngitis, or inflammation of the “voicebox,” has been identified as yet another manifestation of GERD. Symptoms one might see with this problem include hoarseness, throat clearing, sore throat, and the globus sensation, which is characterized by a feeling of a lump in the throat which does not resolve. Some researchers have associated vocal cord nodules, laryngeal ulcers, etc. with GERD, as well.

Diagnostic tests for GERD may include barium swallow, esophagegastroduodenoscopy (EGD), and 24-hour pH monitoring. EGD is less likely to be diagnostic in patients with atypical reflux symptoms; only about 10 percent of these patients will have endoscopic evidence of reflux esophagitis, as



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opposed to about 50 percent of patients with more typical symptoms. A 24-hour pH probe is more sensitive (approximately 70-80 percent), but a negative test does not exclude reflux as an etiology (study of origination) of a patient's symptoms, particularly in the atypical reflux population. For this reason, most patients whose history suggests atypical reflux symptoms are treated empirically with proton pump inhibitors (PPIs) such as omeprazole or lansoprazole, typically in a twice-daily dosing regimen. Diagnostic testing is reserved for that subset of patients who fail to respond to this therapy. Patients with atypical GERD symptoms will respond to twice daily PPI therapy between 52 and 98 percent of the time. Often, it takes several months' worth of treatment with high-dose PPIs before a major benefit is seen. If medical therapy fails and diagnostic testing confirms the presence of reflux, there is an option of surgery (i.e. Nissen fundoplication), although research has shown that patients with atypical GERD symptoms respond less well to anti-reflux surgery than do patients with the more typical GERD symptoms of heartburn and regurgitation.

It should be noted that while the above symptoms are the most common atypical reflux complaints, other "atypical" reflux-associated phenomena do occur, and can be serious. Reflux-associated aspiration pneumonia and

bronchitis may occur, for example, and may lead to permanent lung damage. For this reason, patients with recurrent aspiration-related lung infections are often referred for anti-reflux surgery once GERD is established as the culprit.

Gastroesophageal reflux disease (GERD) can present with both typical and atypical symptoms. One must remain vigilant for unusual symptoms of asthma, laryngitis, chronic cough or atypical chest pain, even in patients without classic GERD complaints. Proper diagnostic testing can lead to proper therapy for this difficult problem, although the best initial course of action in patients whose history is suggestive of atypical reflux symptoms is often acid suppression with twice daily PPI therapy. Anti-reflux surgery may be an option in patients who do not respond to aggressive medical therapy or who have major complications of chronic reflux, such as aspiration pneumonia or recurrent bronchitis.

For more information on Atypical Reflux or on any other gastroenterological problems, Dr. Murphy can be reached at the Center for Digestive & Liver Health located at 1139 Lexington Avenue, Savannah, GA 31405 or you may call him at (912) 303-4200