

## WHEN IS IT JUST A BURP ... AND WHEN IS IT REFLUX?

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Much of the public's confusion about gastroesophageal reflux disease (GERD) stems from the difficulty recognizing the disease. Unlike a broken leg or a bloody nose, GERD may be a subtle, yet destructive disease. Since up to 40% of adults experience at least some GERD symptoms, questions involving the condition are important. What is GERD, and when and why should you be concerned about it?

### What is GERD

GERD is an upward displacement of stomach fluids into the esophagus, which leads to certain symptoms or damage to the esophagus. The most common symptom of reflux disease is heartburn. This is the familiar substernal chest burning that often radiates from the lower tip of the breastbone upwards into the lower and then upper chest. This symptom may be accompanied by burping, excessive salivation filling the mouth with water (known as waterbrash), and dysphagia (difficulty swallowing food). These symptoms may be positional and worse when lying down. They may also be worse when eating or drinking, especially certain items -- such as alcohol, peppermint, fatty foods, and acidic foods (such as orange juice).

While the symptoms described above have long been associated with reflux disease, there is now a growing concern about other symptoms that can be caused by reflux. These symptoms are known as the extra-esophageal symptoms of reflux and include manifestations such as asthma, laryngitis, chronic cough, halitosis (bad breath), and even sleep disorders. These symptoms are much more commonly caused by GERD than had been previously recognized. For instance, up to 30% of chronic cough patients have GERD as a reason for their cough. Furthermore, up to half of those with an extraesophageal manifestation of reflux will not have heartburn. This means their physicians will not have a helpful clue that their symptom is caused by GERD. Extra-esophageal reflux may be more than a nuisance -- studies have shown that GERD is a strong risk factor for laryngeal cancer, as well.

### When should a person with heartburn be concerned about GERD?

Unfortunately, there is no simple answer to this question. It turns out that severity of symptoms is poorly predictive of severity of GERD -- some subjects with very high amounts of acid coming up into the chest may have only trivial symptoms of reflux, whereas others with severe symptoms may have relatively normal acid exposures. On the other hand, frequency of GERD symptoms is a

relatively strong indicator of GERD severity. What does this mean? If you are a person who gets severe heartburn once every other month after a night of beer and pizza, a few TUMS and a little less food and drink next time may be all that is necessary. On the other hand, if you are experiencing symptoms weekly or more often on a normal diet, even if the symptoms are not severe, discussion with your doctor is advisable.

### **How do we treat GERD?**

Elevating the head of the bed with bricks, avoiding late night and/or large meals, cessation of smoking and drinking alcohol, and avoidance of the foods mentioned above are some of the measures that we commonly suggest. For those in whom these measures fail to give relief, drug therapy is recommended. Although antacids are fine for infrequent or mild symptoms, they are not a good strategy for frequent or severe symptoms. Too many people we see in our clinic are going through a bottle of TUMS every 2-3 days before they discuss the problem with their doctor. Some of these patients may do fine with an H<sub>2</sub> receptor antagonist, such as Zantac, Tagamet, Pepcid, or Axid. Over-the-counter varieties of these medications are at half the strength of the prescription medications, so failure of over-the-counter medications does not necessarily mean you might not respond well to prescription doses. Your doctor may prescribe a proton pump inhibitor. This class of medications includes Prilosec, Prevacid, Aciphex, Protonix, or Nexium. Proton pump inhibitors are the most potent acid suppressive drugs currently available. Although doctors were initially concerned that long-term usage of these agents might be harmful to patients, studies now indicate these drugs are safe even when taken continuously for years. This excellent safety record has led the Food and Drug Administration (FDA) to permit manufacturers to market Prilosec to go over-the-counter. Some patients with relatively severe GERD might opt to undergo a surgical anti-reflux procedure. This surgery can now be done laparoscopically, which is a minimally invasive technique. This option might be particularly attractive for the patient who is unable to get good control of his or her symptoms even with maximum medications, or the patient who dislikes or forgets to take his/her medicine.

### **GERD can cause problems beyond discomfort**

Long-term exposure of the esophagus to acid can cause a narrowing of the esophagus, called stricture formation. This problem is usually amenable to endoscopic therapy, in which balloons or dilators are used to stretch the esophagus to a more normal diameter. Erosive esophagitis is a condition where the esophageal lining is eaten away by the gastric contents. The inflamed area can bleed or cause chest pain. Perhaps the most devastating complication of GERD is the development of esophageal cancer. Patients with frequent severe GERD are 16 times more likely to get esophageal cancer than people who do not experience GERD. The cancer is thought to occur because the normal lining of the esophagus transforms or changes into a pre-malignant state known

as Barrett's esophagus. Over time, a small portion of people with Barrett's will progress on to cancer.

### **Use of upper endoscopy to assess the condition of their esophagus**

Certain symptoms, known as alarm symptoms, are known to be associated with severe conditions of the esophagus and deserve immediate investigation. These symptoms include dysphagia, odynophagia (pain with swallowing), anemia, throwing up or passing blood in the stools, and weight loss. Blood passed from the esophagus into the stool will often appear jet black, a condition which is known as melena. It is less clear is when the subject with GERD -- but no alarm symptoms -- needs endoscopy. The American College of Gastroenterology suggests that anyone with long-term symptoms undergo a single screening upper endoscopy. The primary goal of this examination is to look for Barrett's esophagus or early adenocarcinoma. If the patient is found to have Barrett's esophagus, most doctors will recommend repeat endoscopies to monitor the Barrett's and make sure it does not turn into cancer. Upper endoscopy may be especially useful in patients who are older, Caucasian, and/or male, since all of these characteristics are known as risk factors for esophageal cancer.

### **New endoscopic techniques**

New endoscopic techniques have been developed to treat GERD without medications or surgery. For example, endoscopic sewing devices "sew tight" the lower esophagus, allowing less acid to come up into the chest. Another example is the Stretta device, which uses heat to thicken the lower esophagus, thereby decreasing the amount of fluid that is able to get up into the chest. Third, Enteryx is an injectable polymer that can be endoscopically placed at the lower end of the esophagus to thicken it, decreasing the amount of gastric contents that can reflux. Finally, the Plicator is similar to a giant stapler, designed to tighten the bottom of the esophagus with one big pacman-like bite, leaving a stitch that goes all the way through the wall of the stomach. Experience with all of these procedures is still rather preliminary, and it remains to be seen whether any of them will provide lasting relief of GERD symptoms. These procedures do hold the promise, however, that one day GERD symptoms may be addressed by the gastroenterologist without need of medications or surgeries. If you are confused about how much to be concerned about your GERD symptoms, you have it right -- doctors are not always entirely clear when we need to worry about them either. By following the simple suggestions above, you may be able to rid yourself of these bothersome symptoms with over-the-counter remedies. But, if that does not provide the relief you need, do yourself a favor and talk to your doctor.