BURNING ISSUES: REFLUX DISEASE AND YOU  
By Nicholas Shaheen, MD, MPH

WHEN IS IT JUST A BURP, AND WHEN IS IT REFLUX?  
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 worry about it?

WHAT IS GERD  
GERD is an upward displacement of the fluid of the stomach into the esophagus, which leads to 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, then upper, chest. This symptom may be accompanied by burping, excessive salivation filling the mouth with water (also known as waterbrash), and dysphagia, or difficulty swallowing food. These symptoms may be positional and worse lying down. Also they may be made worse with eating. Certain foods, such as alcohol, peppermint, fatty foods, and acidic foods such as orange juice, might make these symptoms worse.

While the symptoms described above have long been known to be associated with reflux disease, there is a growing concern about other symptoms, which 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 will have GERD as a reason for their cough. Furthermore, up to half of those with an extra-esophageal manifestation of reflux will not have heartburn. That means that their physicians will not have a helpful clue that their symptom is caused by GERD. Extraesophageal reflux may be more than a nuisance - studies show that GERD is a strong risk factor for laryngeal cancer as well.

WHEN SHOULD A PERSON WITH HEARTBURN WORRY 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, and some subjects with very high amounts of acid coming up into the chest will have only trivial symptoms of reflux, whereas other with severe symptoms will have relatively normal acid exposures. On the other hand, frequency of GERD symptoms is a relatively strong indicator of GERD severity. What should one take away from this? If you are a person that gets severe heartburn once every other month after a night of beer and pizza, a few TUMS and a little less food next time may be all that is necessary. On the other hand, if you are experiencing symptoms weekly or more often, even if the symptoms are not severe, discussion with your doctor is advisable.
HOW DO WE TREAT GERD?
For infrequent or mild symptoms, lifestyle modifications may be all that is necessary. Elevating the head of the bed with bricks, avoiding late 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 initiated. 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 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 H2 receptor antagonist, such as Zantac, Tagamet, Pepcid, or Axid. The over-the-counter varieties of these medications are at half the strength of the prescription medications, so failure of the over-the-counter medications does not mean you might not respond to prescription doses.

Often, your doctor will choose to prescribe a proton pump inhibitor. This class of medications includes Prilosec, Prevacid, Aciphex, Protonix, or Nexium. The 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 demonstrate the drugs to be safe even when taken continually for years. This excellent safety profile has lead the Food and Drug Administration to allow manufacturers to allow 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, or minimally invasively. This option might be particularly attractive for the patient who is unable to get good control of his or her symptoms even with maximal medications, or the patient who dislikes or forgets to take his/her medicine.

GERD CAN CAUSE PROBLEMS BESIDE DISCOMFORT.
Long-term exposure of the esophagus to acid can cause narrowing of the esophagus, or stricture formation. This problem is usually amenable to endoscopic therapy, when 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 esophageal cancer. Patients with frequent severe GERD are 16 times more likely to get cancer than people who do not experience GERD. The cancer is thought to occur because the normal lining of the esophagus transforms, or changes, to a pre-malignant state known as Barrett's esophagus. Over time, a small portion of people with Barrett's will progress on to cancer.

ONE AREA OF CONFUSION FOR BOTH DOCTORS AND PATIENTS IS WHEN SOMEONE WITH GERD NEEDS 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 in the setting of heartburn. The alarm symptoms include dysphagia, odynophagia (or pain with swallowing), anemia, throwing up or passing blood in the stools, and weight loss. Blood passed from the esophagus in the stools will often appear jet black, a condition which is known as melena. 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 assess for Barrett's esophagus or early adenocarcinoma. If the patient is found to have Barrett’s esophagus, most doctors 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, as all of these are known to be risk factors for esophageal cancer.
AN INTERESTING RECENT DEVELOPMENT IN GERD

An interesting development in GERD is the creation of Endoscopic techniques. They are designed to treat GERD without medications or surgery. Endoscopic sewing devices "sew tight" the lower esophagus, allowing less acid to come up in the chest. The Stretta device uses heat to thicken the lower esophagus, decreasing the amount of fluid, which is able to get up in the chest. Enteryx is an injectable polymer that can be endoscopically placed at the lower end of the esophagus to thicken it, decreasing how much gastric contents 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, which leaves a stitch that goes all the way through the wall of the stomach. Experience with all of these procedures is 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

Therefore, if you are confused about how much to be worried about your GERD symptoms, you got it right - doctors aren't 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. If you are unable to do so, do yourself a favor and talk to your doctor about it. Relief may be around the corner.