Gastroesophageal Reflux Disease

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"It was the peach pie that did it. Not long after I devoured a hearty slice of this scrumptious dessert, my insides began to feel like a volcano – hot, roiling eruptions, ugly, painful pressure. This was no delicate dyspepsia. This was a major assault on my esophagus. Lots of antacid over the next few hours finally settled me down, and I decided it was time to start paying attention to my GERD."

The Problem

GERD is gastroesophageal reflux disease, a chronic condition that some people think of as heartburn. Often it feels like that, a burning sensation in the chest. What's actually happening is that acid (or sometimes bile) from the stomach is backing up into the esophagus.

When we eat, food and liquids go down the esophagus to a muscle at the bottom called the lower esophageal sphincter (LES). The LES loosens its hold on the esophagus to allow what we've consumed to continue into the stomach. Then it tightens again, closing the passage from esophagus to stomach. When the sphincter doesn't function properly, because it's too weak to hold the esophagus shut, then stomach acid can wash back up (reflux) into the esophagus. A stomach that is slow to empty can produce the same problem. Eventually this can cause the esophageal irritation and inflammation known as GERD.

As individuals age, all parts of their bodies begin to show wear and tear, so it's possible for acid reflux to develop or worsen. Certain physical changes caused by polio may contribute to the chance of experiencing GERD. For example, scoliosis, swallowing problems, or lower body weaknesses may play a role in this scenario.

Common symptoms of GERD include chest pain (which always needs to be checked out, since this is easy to confuse with a heart problem), persistent coughing, a sore throat or hoarseness caused when the acid refluxes to the area of the larynx (voice box) and pharynx (throat), and even asthma. A sour taste in the mouth and belching can also be signs to watch for. We're advised to seek professional advice if we experience acid reflux several times a week or if it takes repeated doses of antacid to stop it.

Certain conditions can add to the probability of having GERD because of the various effects they have on the stomach particularly, but also the LES and esophagus. Some examples of these are obesity, diabetes, hiatal hernia, peptic ulcer and connective tissue disorder. Your doctor will be able to identify others.

If left untreated, GERD can be serious. Scar tissue that forms when cells in the esophagus are damaged by repeated assaults from acid may narrow the food pathway, causing food to get caught, making swallowing difficult. Or an esophageal ulcer can form when acid erodes tissue that lines the esophagus, causing pain and bleeding and swallowing problems. Occasionally a cellular change occurs over time after frequent acid refluxes. This is known as metaplasia, and it can mean an increased risk of esophageal cancer.

Although estimates vary, between 7-10% of the US population experiences GERD. The percentage markedly increases after age 40.

What We Can Do

We can take steps to try to keep GERD from getting worse. Certain lifestyle changes can make a big difference. Here are some common suggestions:

Stop smoking – Smoking encourages stomach acid, belching and reflux.

Stay away from acid reflux "triggers" – Food and drink such as alcoholic beverages, coffee, caffeine, carbonated drinks, orange juice, grapefruit juice, chocolate, tomatoes and food made with tomatoes, fried foods, fatty foods, spicy foods, garlic, onions and even mint (never mind that antacids

■ The role of hiatal hernia in GERD continues to be debated and explored. It is a complex topic because some people have a hiatal hernia without having reflux, while others have reflux without having a hernia.

■ Much research is needed into the role of the bacterium *Helicobacter pylori.* The ability to eliminate *H. pylori* has been responsible for reduced rates of peptic ulcer disease and some gastric cancers. At the same time, GERD, Barrett's esophagus, and cancers of the esophagus have increased. Researchers wonder whether having *H. pylori* helps prevent GERD and other diseases. Future treatment will be greatly affected by the results of this research.

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are often flavored with mint). If a certain food or preparation method causes problems, avoid it.

Weigh less and eat less – Being overweight can push up on the stomach, which forces acid into the esophagus. Eating too much at one time can also pressure the LES to open, causing acid reflux.

Take the pressure off – Give food a good chance to get to its destination: wear clothes that don't bind at the waist. Resist lying down after eating, as well as doing jobs that require stooping and bending, such as gardening. Eat at least three or four hours before going to bed.

Let gravity help – Raise the head of your bed six-eight inches with cement or wooden blocks, or place a wedge (sold at most pharmacies) between the mattress and box spring.

Mellow out – Stress can be a factor.

Check with your doctor – It's possible for certain medications such as tranquilizers, calcium channel blockers, and sedatives to make GERD worse.

Treatment

There are many ways of treating acid reflux, depending upon its severity. Over-the-counter antacids such as Tums®, Mylanta®, Maalox® and Rolaids® (which neutralize acid) are what most people reach for first. *H-2-receptor blockers* such as Zantac®, Tagamet® and Pepcid® (which reduce acid production) and proton pump inhibitors such as Prilosec® (which block acid production) can now be purchased at an over-the-counter strength.

For those who have more than a little heartburn now and then, prescription-strength medication may be necessary. Again, there are many options. Stronger versions of H-2-receptor blockers include Zantac®, Pepcid®, Tagamet® and Axid®. Prevacid®, Nexium®, Prilosec®, Protonix® and AcipHex® are examples of prescription-strength proton pump inhibitors. A thorough discussion about symptoms and side effects will help find the right medication.

If medications are ineffective or cannot be tolerated, there are certain medical procedures available, though they are seldom needed because medications usually handle the situation. Various types of fundoplication are possible. One is laparoscopic surgery, which "tucks up" the LES to tighten it. Another restructures the LES to give it the strength it needs to resist reflux.

Other procedures can be done endoscopically. Individuals should discuss these surgeries carefully with their doctors if one of them is recommended. Risks accompany all surgery, and some of these can be greater for certain polio survivors. For instance, survivors with pulmonary problems and those who use ventilators need to take great care in arranging the details of their surgical experience.

In the end, the smart thing for people like me to do is to make a thorough list of symptoms, discuss them with their doctor/gastroenterologist, pay attention to treatment choices, and then follow the plan the two have laid out together. ▲

Resources

About GERD, International Foundation for Functional Gastrointestinal Disorders, www.aboutgerd.org.

Calmes, Selma Harrison, MD, Chairman and Professor, Anesthesiology Department, Olive View/UCLA Medical Center, Sylmar, California.

The Facts about Acid Reflux Disease, TAP Pharmaceuticals, Inc., Lake Forest, Ilinois.

Heartburn/GERD, MayoClinic.com, www.mayoclinic.com/health/heartburn-gerd/DS00095.

LPR Reflux, The Center for Voice Disorders of Wake Forest University and The Department of Otolaryngology, Bowman Gray School of Medicine.

Milone, Mark J., MD, Gastroenterologist, Bergan Doctors Building, Omaha, Nebraska.

Orr, W.C. Night-time gastro-esophageal reflux disease: prevalance, hazards and management. *Eur. J. Gastroenterol. Hepatol.* 17, 113-120 (2005).

The Word on GERD, American College of Gastroenterology, www.acg.gi.org/patients/gerd/word.asp.