Gastroesophageal Reflux Disease (GERD)



GASTROENTEROLOGY DEPARTMENT



WHAT IS GERD OR HEARTBURN?

Gastroesophageal reflux refers to the backward flow of acid from the stomach up into the esophagus. People will experience heartburn, also known as acid indigestion, when excessive amounts of acid wash back into the esophagus. Most people describe heartburn as a feeling of burning chest pain, localized behind the breastbone that moves up toward the neck and throat. Some even experience a bitter or sour taste of the acid in the back of the throat. The burning and pressure symptoms of heartburn can last as long as two hours and are often worsened by eating.

HOW COMMON IS GERD?

Over 60 million Americans experience acid indigestion at least once a month and some studies have suggested that over 15 million Americans experience acid indigestion daily. Symptoms of acid indigestion are more common among the elderly and women during pregnancy.

WHAT KIND OF DIET CHANGES CAN HELP ACID REFLUX?

One thing you can do to reduce your risk for heartburn and acid reflux diseases is to eat low-fat, high-protein meals. Also, eat smaller meals more frequently; stop eating before you get too full, and avoid eating at least two hours before bedtime.

It may also help to avoid certain beverages and foods.

AVOID BEVERAGES SUCH AS:

- Coffee or tea (both regular and decaffeinated)
- Other beverages that contain caffeine, such as energy drinks
- Carbonated beverages
- Alcohol

AVOID FOODS SUCH AS:

- Citrus fruits, such as oranges and lemons
- Tomatoes and products that contain tomatoes such as salsa and tomato sauce
- Chocolate
- Mint or peppermint
- Fatty and spicy foods
- · Onions and garlic

WHAT KIND OF LIFESTYLE CHANGES CAN HELP ACID REFLUX?

Lifestyle changes can help reduce the frequency of heartburn. Considering trying to:

- Maintain a healthy weight. Excess pounds can put pressure on your abdomen, pushing up your stomach and causing acid to back up into your esophagus.
- Avoid tight-fitting clothing. Clothes that fit tightly around your waist put pressure on your abdomen and the lower esophageal sphincter.
- Don't lie down after a meal. Wait at least two hours after eating before lying down or going to bed.
- Elevate the head of your bed. If you regularly experience
 heartburn at night or while you're trying to fall asleep, try
 elevating the head of the bed. Put wood or cement blocks
 under the feet of the bed to raise your head by six to nine
 inches. If it's not possible to elevate your bed, try inserting
 a wedge between the mattress and box spring to elevate
 your body from the waist up. Raising your head with additional pillows is not effective.
- Don't smoke. Smoking decreases the lower esophageal sphincter's ability to function properly.

Adapted from the American College of Gastroenterology *Digestive Disease Specialists Committed to Quality in Patient Care*, Common Gastrointestinal Problems, A Consumer Health Guide

WHEN SHOULD YOU SEE A DOCTOR ABOUT GERD?

When symptoms of acid indigestion are not controlled with modifications in lifestyle and over-the-counter medicines are needed more often than twice a week, you should see your doctor.

When GERD is left untreated serious complications can occur, such as severe chest pain that can mimic a heart attack, esophageal stricture (a narrowing or obstruction of the esophagus), bleeding or Barrett's esophagus (a pre-malignant condition of the esophagus). Symptoms suggesting that serious damage has already occurred include:

- Dysphagia: A feeling that food is trapped behind the breast bone or throat.
- Bleeding: Vomiting blood or tarry, black bowel movements.
- Choking: Sensation of acid refluxed into the windpipe causing shortness of breath, coughing, hoarseness of the voice.

WHAT TYPE OF TESTS ARE NEEDED TO EVALUATE GERD?

Your doctor may wish to evaluate your symptoms with additional tests when it is unclear whether your symptoms are caused by acid reflux or if you suffer from complications of GERD such as dysphagia, bleeding, choking, or if your symptoms fail to improve with prescription medications. Your doctor may decide to conduct one or more of the following tests.

Barium Esophagram or Upper GI X-Ray

This is a test where you are given a chalky material to drink while X-rays are taken to outline the anatomy of the digestive tract.

Endoscopy

This test involves insertion of a small lighted flexible tube through the mouth into the esophagus and stomach to examine for abnormalities. The test is usually performed with the aid of sedatives.

Esophageal Manometry or Esophageal pH

This test involves inserting a small flexible tube through the nose into the esophagus and stomach in order to measure pressures and function of the esophagus. With this test, the degree of acid refluxed into the esophagus can be measured as well.

SURGERY

Surgeons perform anti-reflux surgery on patients with longstanding gastroesophageal reflux disease not controlled with medication. The surgical technique attempts to improve the natural barrier between the stomach and the esophagus that prevents acid reflux from occurring.

MEDICATIONS OFTEN PRESCRIBED FOR GERD

Prescription medications to treat GERD and ulcers include drugs called $\rm H_2$ -receptor antagonists ($\rm H_2$ -blockers) and proton pump inhibitors. These medicines help reduce stomach acid, which can exacerbate symptoms and can hinder healing.

HSUB,-RECEPTOR ANTAGONISTS

Since the mid-1970's $\rm H_2$ -receptor antagonists have been used to treat GERD and ulcer disease. In GERD, $\rm H_2$ -receptor antagonists improve the symptoms of heartburn and regurgitation and heal mild-to-moderate esophagitis. Symptoms are eliminated in over 50% of patients with twice a day prescription dosage of the $\rm H_2$ -receptor antagonists. Healing of esophagitis may require higher dosing. These agents maintain remission in about 25% of patients.

 $\rm H_2$ -receptor antagonists are generally less expensive than proton pump inhibitors and provide adequate, cost-effective approaches as the first-line treatment as well as maintenance agents in GERD. In mid-1995, the FDA approved availability of some $\rm H_2$ -blockers without prescription. Some are already available in dosage levels appropriate for treatment of heartburn.

PROTON PUMP INHIBITORS

Proton pump inhibitors (PPIs), such as omeprazole and lansoprazole, have been found to heal erosive esophagitis (serious forms of GERD) more rapidly than $\rm H_2$ -receptor antagonists. PPIs provide not only symptom relief but also symptom resolution in most cases, even in those with esophageal ulcers. Studies have shown PPI therapy can provide complete endoscopic mucosal healing of esophagitis at 6 to 8 weeks in 75% to 100% of cases. Daily PPI treatment provides the best long-term maintenance of esophagitis, particularly in keeping symptoms and disease in remission for those patients with moderate-to-severe esophagitis. Plus this form of treatment has been shown to retain remission for up to five years.