## GERD

# What is GERD?

Gastroesophageal reflux disease, or GERD, occurs when acid from the stomach backs up into the esophagus. Normally, food travels from the mouth, down through the esophagus and into the stomach. A ring of muscle at the bottom of the esophagus, the lower esophageal sphincter (LES), contracts to keep the acidic contents of the stomach from "refluxing" or coming back up into the esophagus. In those who have GERD, the LES does not close properly, allowing acid to move up the esophagus.

When stomach acid touches the sensitive tissue lining the esophagus, it causes a reaction similar to squirting lemon juice in your eye. This is why GERD is often characterized by the burning sensation known as heartburn.

Occasional heartburn is normal. However, if heartburn becomes chronic, occurring more than twice a week, you may have GERD. Left untreated, GERD can lead to more serious health problems.

#### Who gets GERD?

Anyone can have GERD. Women, men, infants and children can all experience this disorder. Overweight people and pregnant women are particularly susceptible because of the pressure on their stomachs. Recent studies indicate that GERD may often be overlooked in infants and children. In infants and children, GERD can cause repeated vomiting, coughing, and other respiratory problems such as sore throat and ear infections. Most infants grow out of GERD by the time they are one year old.

## Tips to Prevent GERD

- Do not drink alcohol
- Lose weight
- Quit smoking
- Limit problem foods such as:
  - Caffeine
  - Carbonated drinks
  - Chocolate
  - Peppermint
  - Tomato and citrus foods
  - Fatty and fried foods
- Wear loose clothing
- Eat small meals and slowly

## What are the symptoms of GERD?

The symptoms of GERD may include persistent heartburn, acid regurgitation, and nausea. Some people have GERD without heartburn. Instead, they experience pain in the chest that can be sever enough to mimic the pain of a heart attack, hoarseness in the morning, or trouble swallowing. Some people may also feel like they have food stuck in their throat or like they are choking. GERD can also cause a dry cough and bad breath.

#### What are the complications of GERD?

GERD can lead to other medical problems such as ulcers and strictures of the esophagus (esophagitis), cough, asthma, throat and laryngeal inflammation, inflammation and infection of the lungs, and collection of fluid in the sinuses and middle ear. GERD can also cause a change in the esophageal lining called Barrett's esophagus, which is a serious complication that can lead to cancer.

## What causes GERD?

Physical causes of GERD can include: a malfunctioning or abnormal lower esophageal sphincter muscle (LES), hiatal hernia, abnormal esophageal contractions, and slow emptying of the stomach.

Lifestyle factors that contribute to GERD include:

- alcohol use
- obesity
- pregnancy
- smoking
- Certain foods can contribute to GERD, such as:
  - citrus fruits
  - chocolate
  - caffeinated drinks
  - $\circ~$  fatty and fried foods
  - garlic and onions
  - mint flavorings (especially peppermint)
  - spicy foods
  - tomato-based foods, like spaghetti sauce, chili, and pizza

When should I see a doctor?

If you experience heartburn more than twice a week, frequent chest pains after eating, trouble swallowing, persistent nausea, and cough or sore throat unrelated to illness, you may have GERD. For proper diagnosis and treatment, you should be evaluated by a physician.

## How can my ENT help?

Otolaryngologists, or ear, nose, and throat doctors, and have extensive experience with the tools that diagnose GERD and they are specialists in the treatment of many of the complications of GERD, including: sinus and ear infections, throat and laryngeal inflammation, Barrett's esophagus, and ulcerations of the esophagus.

### How is GERD diagnosed?

GERD can be diagnosed or evaluated by clinical observation and the patient's response to a trial of treatment with medication. In some cases other tests may be needed including: an endoscopic examination (a long tube with a camera inserted into the esophagus), biopsy, x-ray, examination of the throat and larynx, 24 hour esophageal acid testing, esophageal motility testing (manometry), emptying studies of the stomach, and esophageal acid perfusion (Bernstein test). Endoscopic examination, biopsy, and x-ray may be performed as an outpatient in a hospital setting. Light sedation may be used for endoscopic examinations.

While most people with GERD respond to a combination of lifestyle changes and medication. Occasionally, surgery is recommended. Lifestyle changes include: losing weight, quitting smoking, wearing loose clothing around the waist, raising the head of your bed (so gravity can help keep stomach acid in the stomach), eating your last meal of the day three hours before bed, and limiting certain foods such as spicy and high fat foods, caffeine, alcohol.

Medications your doctor may prescribe for GERD include: antacids (such as Tums, Rolaids, etc.), histamine antagonists (H2 blockers such as Tagamet,), proton pump inhibitors (such as Prilosec, Prevacid, Aciphex, Protonix, and Nexium), pro-motility drugs (Reglan), and foam barriers (Gaviscon). Some of these products are now available over-the-counter and do not require a prescription.

Surgical treatment includes: fundoplication, a procedure where a part of the stomach is wrapped around the lower esophagus to tighten the LES, and endoscopy, where hand stitches or a laser is used to make the LES tighter.

#### Are there long-term health problems associated with GERD?

GERD may damage the lining of the esophagus, thereby causing inflammation (esophagitis), although usually it does not. Barrett's esophagus is a pre-cancerous condition that requires periodic endoscopic surveillance for the development of cancer.