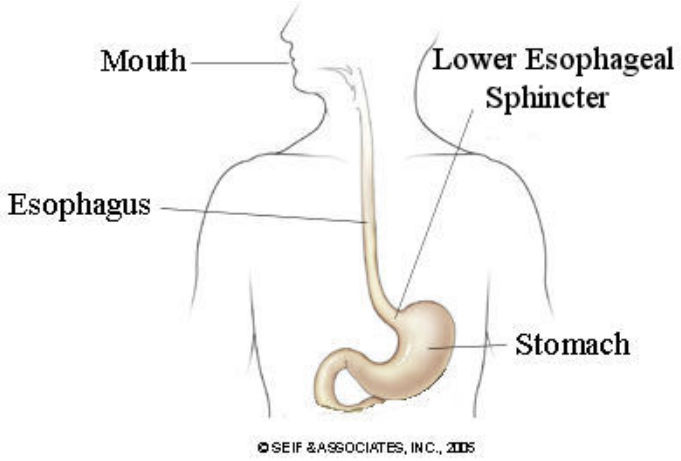
Gastroesophageal Reflux in Children and Adolescents

Almost all children and adults have small, brief episodes of reflux. Reflux is when stomach contents go into the *esophagus* (the tube that connects the mouth to the stomach). This is also called acid reflux. It may be so small that people are not aware of it. When reflux happens often or so severely that it causes damage to the esophagus it is called gastroesophageal reflux disease (GERD).



CAUSES

A ring of muscle at the bottom of the esophagus opens to allow food to enter the stomach. It closes to keep the food and stomach acid in the stomach. This ring is called the lower esophageal sphincter (LES). Reflux can happen when the LES opens at the wrong time, allowing stomach contents and acid to come back up into the esophagus.

SYMPTOMS

The common symptoms of GERD include:

- Stomach contents coming up the esophagus – even to the mouth (*regurgitation*).
- Belly pain – usually upper.
- Poor appetite.
- Pain under the breast bone (*sternum*).
- Pounding the chest with the fist.
- Heartburn.
- Sore throat.

In cases where the reflux goes high enough to irritate the voice box or windpipe, GERD may lead to:

- Hoarseness.
- Whistling sound when breathing out (*wheezing*) (GERD may be a trigger for asthma symptoms in some patients).
- Long-standing (*chronic*) cough.
- Throat clearing.

DIAGNOSIS

Several tests may be done to make the diagnosis of GERD and to check on how severe it is:

- Imaging studies (X-rays or scans) of the esophagus, stomach and upper intestine.
- pH probe – A thin tube with an acid sensor at the tip is inserted through the nose into the lower part of the esophagus. The sensor detects and records the amount of stomach acid coming back up into the esophagus.
- Endoscopy –A small flexible tube with a very tiny camera is inserted through the mouth and down into the esophagus and stomach. The lining of the esophagus, stomach, and part of the small intestine is examined. Biopsies (small pieces of the lining) can be painlessly taken.

Treatment may be started without tests as a way of making the diagnosis.

TREATMENT

Medicines that may be prescribed for GERD include:

- Antacids.

- H2 blockers to decrease the amount of stomach acid.
- Proton pump inhibitor (PPI), a kind of drug to decrease the amount of stomach acid.
- Medicines to protect the lining of the esophagus.
- Medicines to improve the LES function and the emptying of the stomach.

In severe cases that do not respond to medical treatment, surgery to help the LES work better is done.

HOME CARE INSTRUCTIONS

- Have your child or teenager eat smaller meals more often.
- Avoid carbonated drinks, chocolate, caffeine, foods that contain a lot of acid (citrus fruits, tomatoes), spicy foods and peppermint.
- Avoid lying down for 3 hours after eating.
- Chewing gum or lozenges can increase the amount of saliva and help clear acid from the esophagus.
- Avoid exposure to cigarette smoke.
- Avoid alcohol.
- If your child has GERD symptoms at night or hoarseness raise the head of the bed 6 to 8 inches. Do this with blocks of wood or coffee cans filled with sand placed under the feet of the head of the bed. Another way is to use special wedges under the mattress. (Note: extra pillows do not work and in fact may make GERD worse.
- Avoid eating 2 to 3 hours before bed.
- If your child is overweight, weight reduction may help GERD. Discuss specific measures with your child's caregiver.

SEEK MEDICAL CARE IF:

- Your child's GERD symptoms are worse.
- Your child's GERD symptoms are not better in 2 weeks.
- Your child has weight loss or poor weight gain.
- Your child has difficult or painful swallowing.
- Decreased appetite or refusal to eat.
- Diarrhea.
- Constipation.
- New breathing problems – hoarseness, whistling sound when breathing out (wheezing) or chronic cough.
- Loss of tooth enamel.

SEEK IMMEDIATE MEDICAL ATTENTION IF:

- Repeated vomiting.
- Vomiting red blood or material that looks like coffee grounds.

Document Released: 03/09/2005 Document Re-Released: 03/16/2010
ExitCare® Patient Information ©2011 ExitCare, LLC.