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# REFLUX LARYNGITIS AND GASTROESOPHAGEAL REFLUX

## WHY DOES REFLUX OCCUR?

Reflux is caused by a weakness in the muscle at the junction of the esophagus (food tube) with the stomach. Normally, this muscular valve, or sphincter, is suppose to keep food and stomach acid from moving upward from the stomach to the esophagus and larynx. This valve opens to allow food to go down to the stomach and closes to keep the stomach's contents from coming back up. In addition, any increase in abdominal pressure (obesity) which may push acid back up the esophagus, or any patient with a hiatal hernia, will have an increased risk for reflux.

Stomach acid can cause an irritation of the lining of the esophagus, larynx and throat. This can lead to erosive esophagitis, narrowing of the esophagus (stricture), chronic hoarseness, chronic throat clearing, difficulty swallowing, foreign body sensation, asthma or cough, spasms of the vocal cords, sinusitis, and growths on the vocal cords (granulomas), Reflux can rarely lead to esophageal and laryngeal cancer.

## WHAT ARE THE TYPICAL SYMPTOMS OF REFLUX LARYNGITIS AND GASTROESOPHAGEAL REFLUX

Heartburn is the most common symptoms associated with reflux. However, almost 33% of patients with reflux will not have the typical symptom of heartburn. Approximately 40% of the US population experiences these symptoms at least monthly, and about 10% experience them daily. In addition to heartburn, other typical presentations of reflux include non-cardiac chest pain, chronic hoarseness, asthma, or a foreign body sensation in the throat (globus phenomenon).

## HOW IS REFLUX LARYNGITIS AND GASTROESOPHAGEAL REFLUX EVALUATED

In most patients, the presumptive diagnosis is based on the typical history of heartburn. Definitive testing is usually reserved for those patients who do not respond to conservative therapy or empirical drug therapy. Diagnostic tests include an esophagram, endoscopy, pH monitoring, and esophageal motility studies.

## **WHAT IS THE CONSERVATIVE THERAPY OF REFLUX**

1. Antacids neutralize stomach acid and give immediate relief. Popular choices include sodium bicarbonate (Alka Seltzer), calcium carbonate (Tums, Roloids, Alka-Mints), and aluminum and magnesium antacids (Maalox, Mylanta, Riopan, Gaviscon). It is best to use them 30 to 60 minutes after each meal and at bedtime. If you need to be on a low sodium diet you should avoid sodium bicarbonate. Calcium and aluminum can be constipating, while magnesium antacids can cause diarrhea. Patients with kidney disease should avoid magnesium and aluminum antacids. Check with your pharmacist or doctor for any interactions with other medications you may also be taking.
2. Try to have your largest meal of the day at noon.
3. Give the stomach several hours to empty before you go to bed. Try not to eat after your evening meal, and avoid bedtime snacks.
4. Avoid spicy or fried foods, peppermint, citrus, tomatoes, onions, and chocolate, especially if these foods increase symptoms.
5. Try eating a diet that is high-protein, high-carbohydrate, and low-fat.
6. Avoid lying down after you eat. It is often helpful to elevate the head of your bed with wooden blocks under the bedposts to allow gravity to keep the acid in the stomach. Pillows under the head are of negligible benefit.
7. Avoid alcohol, caffeinated beverages, and tobacco.
8. Weight loss, if indicated.
9. Avoid drugs such as nonsteroidal anti-inflammatory drugs, theophylline, anticholinergics, and calcium channel blockers, if feasible. Before discontinuing any medication, please discuss this with your doctor first.

## **WHAT TYPES OF MEDICATIONS ARE USED TO TREAT REFLUX.**

There are several different types of medications available over the counter or by prescription. The acid-blocking drugs (Pepcid, Tagament, Axid, Zantac) are known as H<sub>2</sub>-blockers. These are now available without a prescription; however the dosing may be inadequate. Consult your pharmacist or doctor about any potential side-effects or drug interactions with any of your other medications. Other valuable medications include Propulsid or Reglan, which helps to empty the stomach; or the protein pump inhibitors, such as Prilosec and Prevacid. Carafate is another medication which may help to increase the resistance of the lining tissue of the stomach to acid.

If conservative therapy and medical therapy fails, surgery may be necessary. Traditionally, the fundoplication procedure which serves to strengthen the muscle valve (lower esophageal sphincter) required significant dissection and hospital stay. Recently, the endoscopic fundoplication has shorten hospital stay and recovery.

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