

Acid Reflux and Esophagitis

When acid from the stomach leaks up into the esophagus (foodpipe), the condition is known as acid reflux. This may cause inflammation (heartburn) and other symptoms. A medicine which reduces the amount of acid made in your stomach is a common treatment and usually works well. Some people take short courses of medication when symptoms flare up. Some people need long-term daily medication to keep symptoms away.

Understanding the esophagus and stomach

When we eat, food passes down the esophagus into the stomach. Cells in the lining of the stomach make acid and other chemicals which help to digest food. Stomach cells also make mucus, which protects them from damage from the acid. The cells lining the esophagus are different, and have little protection as compared to the stomach, from exposure to acid.

There is a circular band of muscle (a sphincter) at the junction between the esophagus and stomach. This relaxes to allow food to enter the stomach, and then normally tightens up and stops food and acid from leaking up (refluxing) into the esophagus. In effect, the sphincter acts like a valve.

What are reflux and esophagitis?

- **Acid reflux** means that some acid leaks up (refluxes) into the esophagus.
- **Esophagitis** means inflammation of the lining of the esophagus. Most cases of esophagitis are due to reflux of stomach acid which irritates the inside lining of the esophagus. The lining of the esophagus can cope with a certain amount of acid. However, some people are more sensitive to acid than others. Therefore, some people develop symptoms with only a small amount of reflux and others have a lot of reflux without developing symptoms or esophagitis.
- **Gastro-esophageal reflux disease (GERD)** This is a general term which describes the range of conditions of acid reflux, with or without esophagitis, and associated symptoms.

What are the symptoms of acid reflux and esophagitis?

- **Heartburn:** This is the main symptom of reflux. It is a burning sensation which rises from the stomach or lower chest upwards towards the neck. It is confusing term, as it has nothing to do with the heart!
- **Other common symptoms:** Includes pain in the upper abdomen and chest, feeling sick, having an acid taste in the mouth, bloating, belching, indigestion (dyspepsia), and a burning pain when you swallow hot drinks. As with heartburn, those symptoms tend to come and go, and tend to be worse after a meal.
- **Some uncommon symptoms:** May occur and may mimic other conditions, making the diagnosis more difficult. For example:
 - A persistent cough, particularly at night. That is due to the refluxed acid irritating the windpipe ---Asthma symptoms of cough and wheeze can sometimes be due to reflux.
 - Mouth and throat symptoms sometimes occur. They may include gum problems, bad breath, sore throat, hoarseness, and a feeling of a lump in the throat.
 - Severe chest pain may develop which may be mistaken for a heart attack.

What causes acid reflux and whom does it affect?

The circular band of muscle or sphincter at the bottom of the esophagus normally prevents acid from leaking up (reflux). It is not uncommon for it to not work well and in many cases, the cause is not determined. One known cause of reflux is when the pressure in the stomach rises higher than the sphincter can withstand - for example, during pregnancy, after a large meal, or when bending forward. If you have a hiatus hernia (a condition where part of the stomach protrudes into the chest through the diaphragm), you have an increased chance of developing reflux.

Most people have experienced heartburn on occasion such as after eating a large meal. However, about 1 adult in 3 has some heartburn every few days, and nearly 1 adult in 10 has heartburn at least once a day. In many cases it is mild and soon passes. However, some individuals have symptoms that are more frequent or are severe enough, to affect quality of life. Frequent heartburn is more common in smokers, pregnant women, heavy drinkers, those who are overweight, and those aged between 35 and 64 years.

What tests might be done?

Tests are usually not necessary if you have typical symptoms which are eased by treatment. Tests may be advised if symptoms are severe, or do not improve with treatment, or are not typical of GERD.

- **Gastroscopy (endoscopy)** is the most common test to confirm the diagnosis of GERD. A thin, flexible telescope is passed down the esophagus into the stomach. This allows a doctor to look inside. Inflammation of the lower part of the lining of the esophagus (esophagitis), looks red and inflamed. However, if it looks normal, it does not rule out acid reflux. Some people are overly sensitive to small amounts of acid and can have symptoms with little or no visible inflammation. A test to check the acidity inside the esophagus may be done if the diagnosis is not clear. If symptoms are not typical, other tests such as heart tracings, chest X-ray, etc. may be done to rule out other conditions.

Two terms that are often used after an endoscopy are:

- **Esophagitis.** This term is used when the esophagus looks inflamed.
- **Endoscopy-negative reflux disease.** This term is used when someone has typical symptoms of reflux, but endoscopy is normal.

What can I do to help with symptoms?

The following are commonly advised:

- **Stop Smoking.** The chemicals from tobacco relax the circular band of muscle (sphincter) at the bottom of the esophagus and make refluxing more likely.
- **Avoid certain foods and drinks** that may relax the sphincter and allow more acid to reflux. They include peppermint, tomatoes, chocolate, spicy foods, hot drinks, caffeinated beverages such as coffee and ‘power’ drinks, carbonated beverages including colas and sparkling water, and alcoholic drinks. Eating large meals and eating shortly before bedtime, may cause reflux symptoms.
- **Some medicines** may make symptoms worse. They may irritate the esophagus or relax the sphincter muscle causing reflux. The most common culprits are anti-inflammatory painkillers (such as ibuprofen or aspirin). Others include diazepam, theophylline, nitrates, and calcium-channel blockers such as nifedipine. But this is not a complete (exhaustive) list. Tell your doctor if you suspect that a medicine is causing or making your symptoms worse.
- **Weight loss.** If you are overweight, it puts extra pressure on the stomach and encourages acid reflux.

- **Improved posture.** Lying down or bending, sitting hunched forward a lot during the day, or wearing tight belts, encourages reflux.
- **Better Bedtime Habits.** If symptoms recur most nights, the following may help:
 - Go to bed with an empty, dry stomach. To do this, don't eat in the last three hours before bedtime, and don't drink in the last two hours before bedtime.
 - If you are able, try raising the head of the bed by 6 inches (for example, with books or bricks under the bed's legs). This helps gravity to keep acid from refluxing into the esophagus. Do not use additional pillows, because this may increase abdominal pressure.

What are the treatments for acid reflux and esophagitis?

Antacids:

Antacids are alkaline liquids or tablets that neutralizes the stomach acid. A dose usually gives quick relief. There are many brands which you can buy (Maalox, Gaviscon, Tums) which are generally taken 'as needed,' for mild or infrequent bouts of heartburn.

Acid-suppressing medicines:

You should contact your doctor if you get symptoms frequently or are severe. An acid-suppressing medicine will usually be advised. Two groups of acid suppressing medicines are available - **proton pump inhibitors (PPIs)** and **histamine receptor blockers (H2 blockers)**. They work in different ways, but both reduce the amount of acid that the stomach makes. PPIs include omeprazole, lansoprazole, pantoprazole, rabeprazole, and esomeprazole. H2 blockers include cimetidine, famotidine, nizatidine, and ranitidine.

In general, a PPI is used first, as those medicines tend to work better than H2 blockers. A common initial plan is to take a full-dose course of a PPI for a month or so. This often settles symptoms down and allows any inflammation in the esophagus to clear. You may only need to take antacids or another short course of acid suppressing medicine 'as needed'.

Some people, however, need long-term daily acid-suppressing treatment. Without medication, their symptoms return quickly. Long-term treatment with an acid-suppressing medicine is generally safe, and side-effects are uncommon. The aim is to take a full-dose course for a month or so to settle symptoms. After that, it is common to 'step down' the dose to the lowest dose that prevents symptoms. However, the maximum full dose taken each day is needed by some people. Your doctor should advise you on continued medical therapy or need for further studies if you need to take reflux medications on a regular basis.

Prokinetic medicines Those are medicines that speed up the passage of food through the stomach. They include domperidone and metoclopramide. They are not commonly used but help in some cases, particularly if you have marked bloating or belching symptoms.

Surgery An operation can 'tighten' the lower esophagus to prevent acid leaking up from the stomach. It can be done by 'keyhole' surgery. In general, the success of surgery is no better than acid-suppressing medication. However, surgery may be an option for some people whose quality of life remains significantly affected by their condition and where treatment with medicines is not working well or not wanted long-term.

Are there any complications from esophagitis?

- **Scarring and narrowing (stricture).** If you have severe and long-standing inflammation it can cause a stricture of the lower esophagus. This is uncommon.
- **Barrett's esophagus.** In this condition, the cells that line the lower esophagus become changed. The changed cells are more prone than usual to becoming cancerous. (About 1 or 2 people in 100 with Barrett's esophagus develop cancer of the esophagus).
- **Cancer.** Your risk of developing cancer of the esophagus is slightly increased compared to the normal risk if you have long-term acid reflux. It must be stressed that most people with reflux do not develop any of these complications. Tell your doctor if you have pain or difficulty (food 'sticking') when you swallow, which may be the first symptom of a complication.