Acid Reflux and Oesophagitis

Acid reflux is when acid from the stomach leaks up into the gullet (oesophagus). This may cause heartburn and other symptoms. A drug 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 oesophagus and stomach

When we eat, food passes down the oesophagus (gullet) 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 oesophagus are different and have little protection from acid.

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

What are reflux and oesophagitis?

- Acid reflux is when some acid leaks up (refluxes) into the oesophagus.
- Oesophagitis means inflammation of the lining of the oesophagus. Most cases of oesophagitis are due to reflux of stomach acid which irritates the inside lining of the oesophagus.

The lining of the oesophagus can cope with a certain amount of acid. However, it is more sensitive to acid in some people. Therefore, some people develop symptoms with only a small amount of reflux. However, some people have a lot of reflux without developing oesophagitis or symptoms.

Gastro-oesophageal reflux disease (GORD)

This is a general term which describes the range of situations - acid reflux, with or without oesophagitis and symptoms.

What are the symptoms of acid reflux and oesophagitis?

- Heartburn is the main symptom. This is a burning feeling which rises from the upper abdomen or lower chest up towards the neck. (It is confusing as it has nothing to do with the heart!)
- Other common symptoms include: pain in the upper abdomen and chest, feeling sick, an acid taste in the mouth, bloating, belching, and a burning pain when you swallow hot drinks. Like heartburn, these symptoms tend to come and go, and tend to be worse after a meal.
- Some uncommon symptoms may occur. If any of these symptoms occur it can make the diagnosis difficult as these symptoms can mimic other conditions. For
example:

- A persistent cough, particularly at night sometimes occurs. This is due to the refluxed acid irritating the trachea (windpipe). Asthma symptoms of cough and wheeze can sometimes be due to acid reflux.
- Other mouth and throat symptoms sometimes occur such as gum problems, bad breath, sore throat, hoarseness, and a feeling of a lump in the throat.
- Severe chest pain develops in some cases (and may be mistaken for a heart attack).

**What causes acid reflux and who does it affect?**

The sphincter at the bottom of the oesophagus normally prevents acid reflux. Problems occur if the sphincter does not work very well. This is common, but in most cases it is not known why it does not work so well. In some cases 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 (when part of the stomach protrudes into the chest through the diaphragm), you have an increased chance of developing reflux. (See separate leaflet called ‘Hiatus Hernia’.)

Most people have heartburn at some time, perhaps after a large meal. However, about 1 in 3 adults have some heartburn every few days, and nearly 1 in 10 adults have heartburn at least once a day. In many cases it is mild and soon passes. However, it is quite common for symptoms to be frequent or severe enough to affect quality of life. Regular heartburn is more common in smokers, pregnant women, heavy drinkers, the overweight, and those aged between 35 and 64.

**What tests might be done?**

Tests are not usually necessary if you have typical symptoms. Many people are diagnosed with 'presumed acid reflux' when they have typical symptoms, and the symptoms are eased by treatment. Tests may be advised if symptoms: are severe, or do not improve with treatment, or are not typical of GORD.

- **Endoscopy** is the common test. This is where a thin, flexible telescope is passed down the oesophagus into the stomach. This allows a doctor or nurse to look inside. With oesophagitis, the lower part of the oesophagus looks red and inflamed. However, if it looks normal it does not rule out acid reflux. Some people are very sensitive to small amounts of acid, and can have symptoms with little or no inflammation to see. Two terms that are often used after an endoscopy are:
  - **Oesophagitis**. This term is used when the oesophagus can be seen to be inflamed.
  - **Endoscopy-negative reflux disease**. This term is used when someone has typical symptoms of reflux but endoscopy is normal.

- A test to check the acidity inside the oesophagus may be done if the diagnosis is not clear.
- Other tests such as heart tracings, chest X-ray, etc, may be done to rule out other conditions if the symptoms are not typical.

**What can I do to help with symptoms?**

The following are commonly advised. However, there has been little research to prove how well these 'lifestyle' changes help to ease reflux.

- **Smoking**. The chemicals from cigarettes relax the sphincter muscle and make acid reflux more likely. Symptoms may ease if you are a smoker and stop smoking.
- **Some foods and drinks** may make reflux worse in some people. It is thought that
some foods may relax the sphincter and allow more acid to reflux. It is difficult to be certain how much foods contribute. Let common sense be your guide. If it seems that a food is causing symptoms, then try avoiding it for a while to see if symptoms improve. Foods and drinks that have been suspected of making symptoms worse in some people include: peppermint, tomatoes, chocolate, spicy foods, hot drinks, coffee, and alcoholic drinks. Also, avoiding large volume meals may help.

- **Some drugs** may make symptoms worse. They may irritate the oesophagus, or relax the sphincter muscle and make acid reflux more likely. 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 an exhaustive list. Tell a doctor if you suspect that a drug is causing the symptoms, or making symptoms worse.

- **Weight.** If you are overweight it puts extra pressure on the stomach and encourages acid reflux. Losing some weight may ease the symptoms.

- **Posture.** Lying down or bending forward a lot during the day encourages reflux. Sitting hunched or wearing tight belts may put extra pressure on the stomach which may make any reflux worse.

- **Bedtime.** 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 10-20 cms (for example, with books or bricks under the bed's legs). This helps gravity to keep acid from refluxing into the oesophagus. If you do this do not use additional pillows, because this may increase abdominal pressure.

### What are the treatments for acid reflux and oesophagitis?

**Antacids**

These are alkali liquids or tablets that neutralise the acid. A dose usually gives quick relief. There are many brands which you can buy. You can also get some on prescription. You can use antacids 'as required' for mild or infrequent bouts of heartburn.

**Acid-suppressing drugs**

If you get symptoms frequently then see a doctor. An acid-suppressing drug will usually be advised. Two groups of acid-suppressing drugs are available - proton pump inhibitors (PPIs) and histamine receptor blockers (H2 blockers). They work in different ways but both reduce (suppress) the amount of acid that the stomach makes. Proton pump inhibitors include: omeprazole, lansoprazole, pantoprazole, rabeprazole, and esomeprazole. H2 blockers include: cimetidine, famotidine, nizatidine, and ranitidine.

In general, a proton pump inhibitor is used first as these drugs tend to work better than H2 blockers. A common initial plan is to take a full dose course of a proton pump inhibitor for a month or so. This often settles symptoms down and allows any inflammation in the oesophagus to clear. After this, all that you may need is to go back to antacids 'as required' or to take a short course of an acid suppressing drug 'as required'.

However, some people need long-term daily acid suppressing treatment. Without medication, their symptoms return quickly. Long-term treatment with an acid-suppressing drug is thought to be safe, and side-effects are uncommon. The aim is to take a full dose course for a month or so to settle symptoms. After this, 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.

**Prokinetic drugs**

These are drugs 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 oesophagus 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 drug treatment is not working well or not wanted long-term.

Are there any complications from oesophagitis?

- **Stricture.** If you have severe and long-standing inflammation it can cause scarring and narrowing (a stricture) of the lower oesophagus. This is uncommon.
- **Barrett's oesophagus.** In this condition the cells that line the lower oesophagus become changed. The changed cells are more prone than usual to become cancerous. (About 1 or 2 people in 100 with Barrett's oesophagus develop cancer of the oesophagus.)
- **Cancer.** Your risk of developing cancer of the oesophagus is slightly increased compared to the normal risk if you have long-term acid reflux.

It has to 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.

References

- **Dyspepsia - proven gastro-oesophageal reflux disease**, Clinical Knowledge Summaries (June 2008)
- **The management of dyspepsia in primary care**, MeReC Briefing, No 32, 2006