Gastro-oesophageal reflux disease

Introduction

Gastro-oesophageal reflux disease is a common condition affecting about 1 in every 5 adults. It seems to be more common as we get older.

In reflux the muscle at the top of the stomach is weakened. The upper part of the stomach often passes through the diaphragm, into the chest. This is known as a Hiatus Hernia. A combination of these problems allows stomach acid to move up into the gullet and sometimes as far as the mouth. The stomach acid can damage the lining of the gullet, producing inflammation.

The commonest symptoms of reflux are a burning sensation behind the breastbone (heartburn) and regurgitation of fluids. Regurgitation sometimes causes spillover problems such as cough, hoarse voice and even asthma.

Medical Treatment

In many people, the symptoms of reflux can be controlled with simple changes in eating and drinking habits (avoid the things that cause the problem). If you are overweight, a weight reducing diet can significantly improve symptoms.

Reflux is known to be aggravated by caffeine (coffee, tea, chocolate, cola), alcohol and smoking. It is therefore sensible to avoid these where possible.

If symptoms are bad at night, then raising the head of the bed on bricks or a thick book may also help.

If the problem is troublesome, medication is usually taken in the form of either H2 receptor blocking agents (Cimetidine, Ranitidine) or proton pump inhibitors (Omeprazole, Esomeprazole, Lansoprazole, Pantoprazole, Rabebrazole). These medications often control the symptoms, particularly if the main symptom is heartburn. Such tablets do not cure the problem, however, and prevention of reflux can only be achieved by surgery.

Endoscopic treatments are available in a few centres. These usually involve stapling or stitching the stomach and gullet through the mouth. While some of these procedures may have good early results, they are still very new and their long-term success has not yet been proven.

Surgical Treatment

Before surgery can be recommended it is important to establish that the symptoms experienced are indeed caused by gastro-oesophageal reflux.

An upper endoscopy is performed to look for signs of inflammation present in the gullet and to exclude other problems that can cause similar symptoms. This would normally have been performed before you see a surgeon, but occasionally has to be repeated.

After this a test called 'Oesophageal manometry & pH Studies' is carried out. Manometry measures the pressure within the gullet at rest and during swallowing. This helps to identify the top of the stomach and rules out other conditions that would not benefit from surgery. pH studies monitor the amount of acid coming up into your gullet over a 24 hour period and we are able to correlate this with your symptoms during that time.

This procedure is carried out in the Cardiothoracic Measurement Department at the Royal Derby Hospital. You will be asked to stop all antireflux medication for 2 weeks prior to the test. The test involves passing a fine tube down your nose into your stomach. This is left in place for the 24-hour period, during which time you are encouraged to continue with normal activities, recording any symptoms on a diary sheet. Although it doesn't sound very pleasant, it is normally tolerated very well.

If these tests all confirm the presence of reflux then an operation can usually be recommended.

The majority of operations for gastro-oesophageal reflux are now performed by keyhole (laparoscopic) surgery. Five small incisions are made on the abdominal wall, through which a tiny camera and instruments are passed for the procedure. In a small number of patients this may not be possible and the operation may have to be converted to an open approach.

Most patients have a hiatus hernia associated with their reflux and repair of this hernia is undertaken at the same time as antireflux surgery. There are several types of antireflux operations which can be carried out, but they all have one principle in common, that is, the construction of a one way valve from the oesophagus (gullet) to the stomach. In a complete fundoplication (wrap) the upper part of the stomach is completely wrapped around the lower oesophagus. In a partial fundoplication, the stomach encircles only the front half of the oesophagus. The pros and cons of these two approaches will be discussed with you and a decision will be made prior to your operation.

The operation usually takes between 75 and 100 minutes to carry out.

Complications associated with surgery

Antireflux operations have a low rate of complications. Specific complications are:

1. Damage to the oesophagus, stomach or bowel, leading to leakage from the area, sometimes necessitating another operation to address the problem.

2. Bleeding, again possibly requiring further surgery. Such bleeding is sometimes associated with the spleen and necessitates its removal. If so, it may be necessary to take a penicillin tablet every day for two years.

3. Difficulty in swallowing after surgery.
Almost all patients have some difficulty in swallowing after surgery due to the fact that the oesophagus tends to be rather inactive for a week or two, as well as some swelling in the area of the fundoplication. This means that you will need to take soft and moist food only, for a few days, until you see what degree of difficulty you have. Many surgeons recommend that no solid food at all is taken for two weeks, but I think it can be individualised. Some patients have very little difficulty at all, while others have quite severe difficulty for a few days and problems with solids for weeks or months.
You will find your ability to swallow getting progressively better over days to weeks, and the vast majority of patients will eventually swallow normally after antireflux surgery. A small number of patients find that very lumpy food tends to stick in the lower oesophagus when swallowing, which then causes discomfort.
This of course is not really a problem for patients since it is just a matter of avoiding eating large lumps of food and making sure that food is chewed thoroughly before it is swallowed.
Sometimes, difficulty in swallowing in the first couple of days after operation suggests that a stitch needs readjusting. At this early time after operation, it is simple to readjust the stitches with another quick anaesthetic. This usually only delays discharge by a couple of days and makes very little difference to the convalescent period.

4. Burping and Vomiting
A few patients find restriction in the ability to burp and vomit, but this is usually temporary.

5. Diarrhoea & Flatulence
A small percentage of patients experience problems with a change in bowel habit after antireflux surgery. As a consequence of not being able to burp, some people pass more flatus per rectum. This can be associated with loose stool. Rarely these symptoms can be debilitating, particularly if a patient has suffered from an irritable bowel prior to surgery.

6. Recurrence of Symptoms
All operations have their failures. Figures indicate that 90% of patients will be free

of reflux symptoms 10 years after operation.

The post-operative period in hospital

Most patients experience some degree of discomfort in the abdomen and chest.

Some patients experience pain in the shoulder. This is referred from stitches in the diaphragm and tends to disappear after 24 to 48 hours.

A barium X-ray swallow test is sometimes performed on the day after surgery to confirm the position of the stomach wrap.

If the surgery has been performed laparoscopically, you will find that you will be mobile on the first post operative day. Most patients are able to go home on the second day after surgery. If the operation is performed as an open procedure the length of hospital stay is extended to 6 to 8 days.

The post-operative period at home

Because of the lack of wound pain with key-hole surgery, you may feel as if you have not had an operation. Nevertheless, you will find that you get tired easily for a few days. We ask patients to avoid heavy exertion for the first 12 weeks. You may drive after a week to 10 days and gentle sport can be recommenced after 2 weeks. Most people are able to return to work after 2 weeks, although this can be extended to 2 months with open surgery. We do however advise patients to avoid extreme exertion and heavy lifting for up to 12 weeks.

Most people find with their meals that they become full very quickly and so eat much less, at least for a few months. This means that most patients lose weight as a result of the operation. Many patients see this as a bonus!

Occasionally, you may swallow a large lump of food, which gets stuck in your oesophagus. Whilst this may cause acute discomfort, it is not dangerous and you will not choke. The food will eventually move through or you will bring it back up. This will not jeopardise the operation.

Because you will not be able to easily belch, you should avoid gassy drinks for at least 8 weeks after the operation, and should avoid drinking large volumes of such drinks at any time. Air in the stomach has to move through, so that many people are aware of increased flatulence after the operation. This problem tends to get better with time.