GASTRO-OESOPHAGEAL REFLUX

OVERVIEW OF GASTROESOPHAGEAL REFLUX

Gastroesophageal reflux is a very common condition that ranges in severity from mild occasional attacks of heartburn to more severe complications such as ulceration and narrowing (stricturing) of the oesophagus.
In the normal situation, acid and food is confined to the stomach by a high-pressure area of the oesophagus called the lower oesophageal sphincter. This sphincter prevents regurgitation back into the oesophagus when bending, straining or lying down. In some people this sphincter is weakened. Often this weakness is associated with protrusion of the stomach through a defect in the diaphragm called a hiatal hernia. The final result is reflux of stomach content into the oesophagus causing discomfort and damage to the lining of the oesophagus. This problem is made worse by certain foods and drinks, being overweight and eating before lying down.

Advice and treatment options (plus surgery if necessary) from The Endoscopy Clinic include:

- dietary changes
- weight loss
- medications to reduce stomach acid, or increase muscle contraction in the oesophagus and stomach.

For the majority these measures are adequate to control their symptoms.
There are, however, those who either have persistent symptoms despite medications or prefer not to take tablets long term. Surgical treatment should be considered for these people.

SURGICAL OPTIONS

The aim of surgery is to permanently control the reflux of acid from the stomach into the oesophagus by strengthening the lower oesophagus sphincter. Three main steps achieve this:

1. The stomach is repositioned in its normal location below the diaphragm.
2. The defect in the diaphragm is closed.
3. A portion of the stomach is used to encircle the lower oesophagus to strength the lower oesophageal sphincter (fundal wrap).

Traditionally this operation was performed using a large abdominal incision. While this approach was usually successful, the pain caused by the incision meant that patients spent up to a week in hospital and were unable to work for at least six weeks. Modern technology has made it possible to perform this same operation without the large incision using a video camera called a laparoscope. In most cases five small incisions are used. Two of these are 10mm in size and three are 5mm in size. All the operating is done through these small cuts. The result of this less invasive surgery is that patients are able to return home after only one or two nights in hospital and are often back at work within a week. This new approach is called a **"Laparoscopic Nissen Fundoplication"** and is becoming increasingly popular for long term control of gastroesophageal reflux.

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WHO IS SUITABLE FOR ANTI-REFLUX SURGERY?

Before surgery is advised it is very important that the diagnosis is confirmed beyond doubt. Making the diagnosis usually requires viewing the oesophagus and stomach by gastroscopy (a flexible video camera), taking samples of the oesophageal lining and excluding other causes of chest pain such as heart disease or spasm of the oesophagus. Sometimes it is necessary to use special tests such as oesophageal pH testing where an electrode is positioned in the lower oesophagus for a full day and the severity of reflux is measured.

Surgery is usually only recommended if medications have already been tried and are not effective or a preference to avoid medications is indicated.

WHO IS NOT SUITABLE FOR SURGERY?

If there is any doubt about the diagnosis then surgery should be deferred. People who are medically unfit due to a major illness such as heart disease are not normally considered for surgery. Previous extensive surgery around the oesophagus or stomach makes surgery more hazardous. Certain disorders such as spasm of the oesophagus can cause swallowing difficulties after surgery. The most accurate way to diagnose these disorders is a test called “oesophageal manometry” which measures the pressures in the oesophagus while swallowing. People who have these disorders are not usually operated on but can often benefit from appropriate medication.

WHAT SYMPTOMS ARE LIKELY TO IMPROVE WITH SURGERY?

The symptoms most likely to improve after surgery are heartburn, regurgitation and coughing when lying down. Other symptoms, which may improve, are asthma, hoarseness, abdominal bloating and difficulty in swallowing. Some patients experience an unpleasant taste in their mouth as a component of gastroesophageal reflux. There are a number of other causes of this problem and occasionally this does not resolve after surgery.

WHAT ARE THE SIDE EFFECTS OF SURGERY?

Following surgery, most patients experience a temporary difficulty in swallowing solid foods caused by increased pressure in the lower oesophagus. Normally this improves within two weeks and is managed by avoiding troublesome foods (see below). Occasionally this sensation can persist and rarely is it necessary to stretch (dilate) the oesophagus.

For a period of time following the operation most people feel full after eating a large meal. This problem can be overcome by eating small amounts frequently. As the operation makes the lower oesophageal sphincter airtight some people complain of difficulty in belching and vomiting after surgery. Often this improves with time.

The most frequent side effect described is increased flatus or wind following surgery. This occurs because air is not belched up as easily and people who have gastroesophageal reflux habitually swallow frequently to clear acid from the oesophagus. A temporary problem experienced by most patients is shoulder pain for a few days caused by irritation of the diaphragm.

WHAT ARE THE RISKS OF SURGERY?

Any operation, no matter how small, carries certain risks related to the anaesthetic needed such as heart and lung problems. With modern techniques these risks are now very low. The specific risks of laparoscopic anti-reflux surgery include injury to the oesophagus, stomach, spleen, colon and vagus nerves. Other risks include bleeding, wound infection and formation of blood clots (thrombosis) in the veins in the legs. The experience of the surgeon is the biggest factor in reducing these risks and in good centres the risks should be low.

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DOES THE OPERATION ALWAYS SUCCEED?
The success rate for well-selected patients is over 90% in controlling reflux symptoms but occasionally it is necessary for patients to continue taking medications as some reflux persists.

WHAT ACTIVITIES CAN I PERFORM AFTER SURGERY?
The small skin incisions heal rapidly but the diaphragm repair takes a few weeks to heal. Most people can return to a desk job within one or two weeks but should avoid heavy lifting or straining for at least six week. Patients are encouraged to walk actively after surgery to prevent leg clots.

WHAT SHOULD I EAT AND DRINK AFTER THE OPERATION?
Most people can manage to drink liquids the day after surgery. On the second day after surgery soft food can normally be eaten. For two weeks after the operation solid food should be avoided if possible. After this time it is usually possible to eat a normal diet.
We advise a pre-operative consultation with our dietitian to discuss this in more detail.

GENERAL EATING INSTRUCTIONS
Eat small regular meals
Eat slowly and chew food well
Avoid large meals and fried food
Do not smoke or drink alcohol before meals
Drink small amounts with meals and regularly in between meals
If certain foods cause difficulty – avoid them

FOODS LIKELY TO CAUSE PROBLEMS
Meat – especially red meat and chicken
Fresh bread
Carbonated (fizzy) drinks
Fruit (especially the skin)
Nuts and seeds
Cooked cheese
Bananas

SUGGESTED FOODS
Pureed foods
Soups
Yogurt or jelly
Eggs
Custard or ice cream
Mashed potato
Soft fish

Last reviewed march 2015

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