Advice for patients under the care of Mr Michael Harvey MS FRCS

Laparoscopic Surgery for Reflux

What is gastro-oesophageal reflux disease?

As the term implies, gastro-oesophageal reflux disease is reflux of the stomach contents into the lower part of the gullet. The majority of the stomach contents are acid; this acid burns the lower part of the gullet causing damage. The burning is felt as heartburn, a burning sensation that radiates through the chest and may radiate up to the throat and neck. The basic cause of this problem is the break down of a valve that normally exists between the stomach and the gullet preventing reflux occurring. Other symptoms that may occur are acid regurgitation where acid is felt coming back into the mouth; vomiting, particularly on stooping and bending; choking attacks, particularly at night; chronic cough and difficulty in swallowing. If this acid regurgitation is allowed to continue, it may cause damage, which can lead to narrowing of the gullet, and thus lead to difficulty in swallowing.

What contributes to causing gastro-oesophageal reflux?

Some people are born with a naturally low sphincter pressure and reflux from a very early age. In adult life, fatty and spicy foods, tight clothing, smoking, alcohol and being overweight may precipitate reflux. In pregnancy, reflux nearly always occurs due to the pressure of the baby pushing the stomach up and aiding reflux. A hiatus hernia may also be present. Under these circumstances, a small part of the stomach has ridden up through the diaphragm into the chest and this situation tends to lead to reflux. However, the presence of a hiatus hernia does not necessarily imply that reflux will occur.

What treatments are available for reflux?

Lifestyle changes: The most important lifestyle change to improve the symptoms of reflux is losing weight. If you are overweight, there is often a critical weight. Below this the symptoms of reflux will improve dramatically, above it, reflux will be prominent. Reducing smoking and alcohol consumption will also be helpful. Changing eating habits will also improve symptoms. It is important to have regular meals and to have the last meal several hours before going to bed.

Drug therapy: Drug therapy is usually very successful at improving the symptom of heartburn. Antacids neutralise the stomach acidity and will relieve relatively mild symptoms. If these fail then stronger prescription drugs may be necessary. These are known as proton pump inhibitors. There are several different types of proton pump inhibitors. These drugs dramatically reduce the gastric acid shutting it down to minimal levels. These drugs are usually very effective at relieving heartburn.

Surgey: Surgery may be required if medical treatment fails to relieve the symptoms, or, if the medication satisfactorily relieves the symptoms but as soon as the medication is stopped, the symptoms recur. Many patients prefer to go to surgery rather than take medication for the rest of their lives. Surgery now is performed using laparoscopic (key hole) techniques.

Endoscopic treatments: You may have heard of some new treatments involving endoscopy that are currently under investigation. These are experimental at the moment and not licenced for routine use in patients

What does the operation involve?

The operation is designed to restore the valve mechanism at the bottom end of the gullet and this new valve then prevents reflux of acid from occurring. It is performed using keyhole techniques. There are usually 5 small incisions (all < 1cm in length).

You will usually be admitted to hospital on the day of surgery and can expect one or sometimes two nights in hospital. You will need some blood tests prior to surgery. The operation is carried out under a general anaesthetic and normally takes between one and two hours.

What to expect before anti-reflux surgery

Before proceeding to anti-reflux surgery, it is likely that your surgeon or physician will want you to undergo a series of tests. The first test is likely to be an endoscopy where a tube is passed down the gullet to look at the oesophagus and assess the degree of damage that is being caused by the acid. Following this two further tests are often performed; one is oesophageal manometry, which determines how your gullet works. It demonstrates whether the valve between your gullet and oesophagus has broken down and it ensures that your gullet is working normally (has normal peristalsis). The second test that is likely to be performed is 24-hour pH manometry. In this test a fine probe is placed in the lower part of your gullet so that the amount of acid that flows into the gullet can be measured over a 24-hour period. This shows just how much acid refluxes each day.

What are the advantages of laparoscopic anti-reflux surgery?

The advantages over the old open operation relate to the small incisions used. They include shorter hospital stay (normally 1 night), faster return to normal activity, less postoperative discomfort and a much improved cosmetic result.

What are the risks of Laparoscopic anti-reflux surgery?

The risk of complications from laparoscopic anti-reflux surgery are considerably less than with open anti-reflux surgery. However complications may occur as with any operation. They include include anaesthetic complications, bleeding, injury to the oesophagus, stomach or the spleen. Complications after the operation may include wound or chest infection although these are unusual with the laparoscopic technique. Occasionally for one reason or another it may not be possible to complete the operation using keyhole techniques and conversion to an open operation may be required.

What can you expect after the operation?

You will normally be discharged on the first postoperative day. Depending on the method of skin closure you may or may not need stitches or staples removing from the wounds. The nurse will advise you prior to your discharge. For a few days after the operation you may need some gentle painkillers. These should not be necessary after about 5-7 days. Your anti-reflux medication can stop at the time of the operation and should not be necessary thereafter. If, when you go home, you vomit, have severe pain or severe difficulty in swallowing, you should call the hospital for advice.

You will have some difficulty with swallowing in the early weeks following surgery. This will be most marked with dry food such as bread and large chunks of meat. You will be advised to eat a fairly sloppy diet (mash, mince etc) to start with until the postoperative swelling around the new valve settles. You may also find it less easy to belch or vomit and may experience some discomfort from wind after meals. All of these symptoms tend to settle with time.

Long term side effects are uncommon. You may notice an increased passage of wind (flatus) per rectum. One of the problems of inserting a valve between the stomach and the gullet is that air cannot be freely belched out. This means that the air passes through the intestines and leads to more air being expelled through the back passage.

Where can I get further information?

You can get more information by visiting www.keyholesurgery.net