

Laparoscopic Anti-reflux Surgery

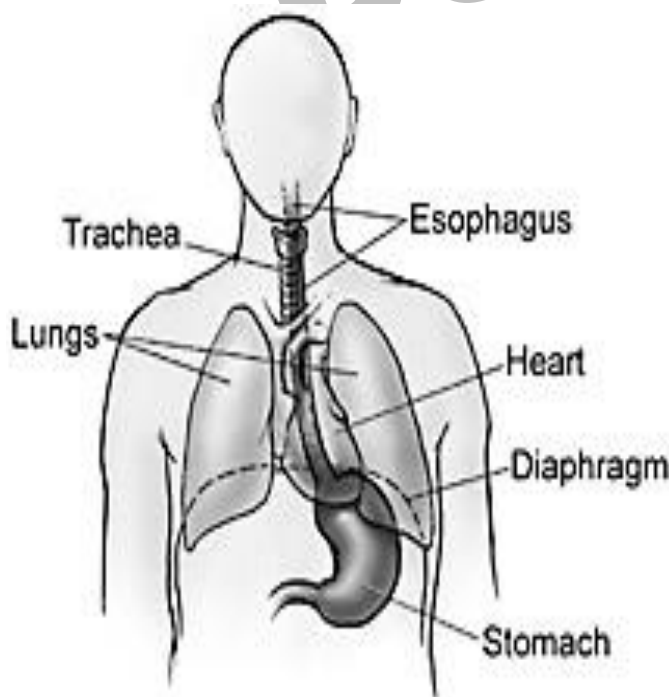
This leaflet tells you about the procedure known as laparoscopic ant-reflux surgery. It explains what is involved, and the common complications associated with this procedure. It is not meant to replace discussion between you and your doctor, but as a guide to be used in connection to what is discussed with your doctor.

Introduction

Anti-reflux surgery is performed to correct the reflux (bringing up) of acid up into the gullet from the stomach. The main symptom of reflux is heartburn (a burning pain felt under the breast bone).

In the past the only surgical option was the open method, involving a large cut in either the upper part of the abdomen or the chest. This was a very painful procedure and involved at least five to seven days in hospital, plus a long recovery period.

The same procedure is now performed laparoscopically, using what is popularly known as the keyhole approach. The operation is performed through five small cuts instead of through a large incision, and usually involves only an overnight stay in hospital.



What is gastro-oesophageal reflux disease?

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 is felt through the chest and may be felt 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 that can lead to narrowing of the gullet and thus lead to difficulty in swallowing.

Information for Patients

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, reflux may be triggered by fatty and spicy foods, tight clothing, smoking, alcohol and being overweight. 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.

Medical treatment of 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.

Surgery

Surgery is 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. Under these circumstances a large number of patients prefer to go to surgery rather than take medication for the rest of their lives.

This particularly applies to younger patients. Surgery now is performed using laparoscopic (keyhole) techniques. This procedure will only be carried out with your consent and you will be asked to sign a consent form

How is laparoscopic anti-reflux surgery performed?

In laparoscopic surgery, surgeons use small incisions, $\frac{1}{4}$ - $\frac{1}{2}$ " long to enter the abdomen through cannulae. These are small tube like instruments. Through these tubes, the laparoscope, which is connected to a tiny video camera, is inserted. This gives the surgeon a magnified view of the inside of the abdominal cavity. The entire operation is performed inside, after the abdomen has been expanded by pumping gas into it.

In anti-reflux surgery, the top part of the stomach is mobilised using special instruments. This part of the stomach is then passed around the lower part of the gullet and the stomach is sutured onto itself to form a very loose wrap of stomach enclosing the lower part of the gullet. This acts as a valve that prevents the acid contents of the stomach refluxing back into the gullet.

Information for Patients

What are the advantages of laparoscopic anti-reflux surgery?

1. Reduced post-operative pain. Following laparoscopic anti-reflux surgery you should feel abdominal discomfort for three or four days and minimal pain thereafter.
2. Short hospital stay. Your hospital stay should only involve same day discharge or one night.
3. A faster return to work. Those with sedentary jobs should be able to resume work within one to two weeks and for heavy manual work, within three to four weeks.
4. Improved cosmetic result. Minimal scarring is present.

What are the risks of laparoscopic anti-reflux surgery?

The complications of laparoscopic anti-reflux surgery are considerably less than with open anti-reflux surgery. However complications may occur as with any operation. Complications during operation may include anaesthetic complications, bleeding, injury to the oesophagus, stomach or very rarely the spleen. Complications after the operation may include wound infection although this is very rare, chest problems such as pneumonia.

What will happen if the operation cannot be completed laparoscopically?

Your surgeon will discuss with you before the operation what will happen if the operation cannot be completely laparoscopically. This will usually mean conversion to an open operation where a much larger cut is made. The usual reasons for this occurring are because it is unsafe to continue with the laparoscopic approach, usually because the vision is not satisfactory, or if complications such as bleeding do occur during the process of the laparoscopic procedure. If you have had a lot of previous abdominal surgery then adhesions may well be present in the abdominal cavity which may make the operation difficult or even impossible.

What are the side effects of this operation?

Long-term side effects are uncommon. The main side effects that do occur are an increased passage of wind (flatus) per rectum. This may be a permanent situation. 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 stomach bloating may develop and the air passes through the intestines and leads to more air being produced per anum. Another side effect is that you will not be able to bolt your food. After laparoscopic anti-reflux surgery it is important to chew food completely and to eat slowly which minimises air swallowing and wind problems. You should also try to avoid talking whilst eating as this results in food not being chewed properly.

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 may include an endoscopy. This is a procedure 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 sphincter between your gullet and oesophagus has broken down and it ensures that your gullet is working normally (has normal peristalsis).

Information for Patients

The second test that may be performed is 24 hour oesophageal pH testing. 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 to expect prior to surgery

Before undergoing surgery you will have your blood checked to ensure that your blood count and biochemistry are normal.

It is customary also to determine your blood group and have serum available should blood be necessary. You may be admitted to hospital the night before the operation or on the day of the operation itself. The operation is done under a general anaesthetic. You will not be aware of the operation being performed.

What to expect post surgery

After the operation, you will recover in a special recovery area near to Theatre until you are fully awake before you return to the ward. Most patients go home the same day. If you are feeling sick after the operation, which may occur due to the anaesthetic, you will be placed nil by mouth until the nausea and sickness wears off.

Usually on the first postoperative day you will be drinking clear fluids and start on a light diet on the second post-operative day. It is advisable to avoid bread and fizzy drinks for the first four to six weeks. You will often notice during the first few weeks that food tends to stick. It is very important during this early postoperative phase to eat slowly and to chew food thoroughly. It often helps to take some liquid with your food.

Immediately after your operation you will have five little patches on your abdominal wall which have usually been glued or have sticking plasters placed over them. Most surgeons use glue or stitches that dissolve and do not need to be removed. You can usually therefore take a shower on the same day as your surgery and a bath about 5 days. For a few days after the operation you may need some gentle painkillers. These should not be necessary after about five to seven days. Your anti-reflux medication should stop at the time of the operation and should not be necessary thereafter. If, when you go home, you vomit repeatedly, have severe pain or severe difficulty in swallowing, you should call your doctor immediately.

Contact us:

If you are going to have an operation you may be asked to attend the hospital for a pre-operative assessment. Please ask our staff any questions you may have about your treatment.

Alternatively, you can phone the main hospital switchboard on 0121 424 2000 and ask to speak to your consultant's secretary.

Additional sources of information:

This leaflet is based on one designed the Association of Endoscopic Surgeons of Great Britain and Ireland, but has been modified (with permission) by us to reflect local policies. The Association of Endoscopic Surgeons of Great Britain and Ireland web site (www.aesgbi.org) had further information on the development of laparoscopic surgery.

Information for Patients

Our commitment to confidentiality

We keep personal and clinical information about you to ensure you receive appropriate care and treatment. Everyone working in the NHS has a legal duty to keep information about you confidential.

We will share information with other parts of the NHS to support your healthcare needs, and we will inform your GP of your progress unless you ask us not to. If we need to share information that identifies you with other organisations we will ask for your consent. You can help us by pointing out any information in your records which is wrong or needs updating.

Additional Sources of Information:

Go online and view NHS Choices website for more information about a wide range of health topics <http://www.nhs.uk/Pages/HomePage.aspx>

You may want to visit one of our Health Information Centres located in:

- Main Entrance at Birmingham Heartlands Hospital Tel: 0121 424 2280
 - Treatment Centre at Good Hope Hospital Tel: 0121 424 9946
 - Clinic Entrance Solihull Hospital Tel: 0121 424 5616
- or contact us by email: healthinfo.centre@heartofengland.nhs.uk.

Dear Patient

We welcome your views on what you thought of this patient information leaflet, also any suggestions on how you feel we can improve through our feedback link below:

- Patient Information Feedback email:
patientinformationleafletfeedback@heartofengland.nhs.uk

If you wish to make any other comments this can be done through the links listed below:

- Patient Opinion: www.patientopinion.org.uk
- I want great care: www.iwantgreatcare.org (Here you can leave feedback about your doctor)

Be helpful and respectful: think about what people might want to know about our patient information and this hospital and how your experiences might benefit others. Remember your words must be polite and respectful, and you cannot name individuals on the sites.

If you have any questions you may want to ask about your condition or your treatment or if there is anything you do not understand and you wish to know more about please write them down and your doctor will be more than happy to try and answer them for you.