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Laparoscopic Nissen Fundoplication

Information Sheet

What is a Laparoscopic Nissen Fundoplication?

The word “Laparoscopic” is the medical term for keyhole surgery. A Nissen Fundoplication is an operation to stop reflux (moving up) of stomach acid into the oesophagus (gullet). This condition occurs when the small ring of muscle at the lower end of the oesophagus does not function properly and allows acid to reflux back up from the stomach.

What does the surgery involve?

Five little “puncture” wounds are made in your abdomen (tummy) and then small tube-shaped instruments are passed into these incisions. The first tube (known as a Laparoscope) is connected to a high intensity light and a video camera so that the surgeon can see what is happening inside you. To provide space for the surgery to be performed, your tummy is filled with carbon dioxide (a harmless gas). The top part of the stomach is then wrapped around the lower part of the gullet. This tightens the closing mechanism (sphincter) at the lower end of the gullet. This creates a one-way valve preventing stomach acid from refluxing back into the gullet. The operation usually takes between 1 and 1½ hours.

It is important to note that in approximately 1% of cases the operation cannot be completed by keyhole surgery. In these cases the surgeon will need to proceed to an “open” operation. This will require a 6-10 inch incision in your abdomen and will result in a hospital stay of several days.

What are the benefits?

The main benefits are the relief of symptoms caused by acid reflux. These symptoms may include heartburn, an acid taste in the mouth, indigestion, sore throat, cough or wheeze. After surgery about 19 patients out of 20 will have complete relief of heartburn and acid in the mouth and be able to come off all forms of acid suppressing medication. Overall, about 85% of patients are completely satisfied with the result following the operation.

What are the risks?

All surgery has some risks, and complications occur in about 2% of cases. Most complications are mild and easily resolved. Specific risks of Laparoscopic Nissen Fundoplication are:

- Injury to the gullet, stomach, blood vessels or other nearby organs. Whilst this is rare, if it happens, the surgeon may have to convert to open surgery to correct the damage.
- About 1% of patients will need future corrective surgery to reduce persistent difficulty in swallowing or abdominal bloating.

General risks of surgery are:

- Deep vein thrombosis (Blood clots in the legs)
- Pulmonary embolism (Blood clot in the lungs)
- Wound infection.
- Very rarely, severe complications may result in death during or after the operation.

Are there any side effects of this operation?

One of the most common side effects of this operation is difficulty in swallowing. This is most troublesome immediately after surgery and gradually improves. You may also notice a reduction in the amount of food that can be taken and having to eat more slowly than before. Other common side effects of this operation are intermittent bloating of the stomach and increased wind (flatus). This occurs because the new one-way valve between the stomach and the gullet may not allow air to be freely belched up. It will therefore pass through the intestine leading to increased flatus from the back passage. Most of these symptoms tend to settle with time.

Are there any alternatives?

Nissen Fundoplication is generally recommended when other treatments have not been satisfactory. These include:

- Medicine to reduce acid reflux (these work by reducing or neutralizing the acid in the stomach of making the stomach empty faster). However, to control your symptoms these may need to be taken regularly for the rest of your life.
- Life style changes such as losing weight, avoiding foods that contribute to acid reflux, and stopping smoking.

What would happen if my symptoms were left untreated?

If acid reflux is allowed to continue it may cause damage to the gullet. This damage could lead to narrowing of the gullet, causing difficulty in swallowing. Severe reflux could also damage the voice box and windpipe, causing some forms of asthma and bronchitis.

How long will I be in hospital?

You will normally require one post-operative overnight stay. If you are not fully recovered, or the open technique is used, you will need to stay in hospital longer.

What happens before the operation?

Prior to admission you may need to have a pre-operative assessment to make sure you are fully prepared for your admission, treatment and discharge. The pre-operative assessment nurses will help you with any worries or concerns that you have and will give you advice on any preparation needed for your surgery.

You must **stop** eating food and milk products at least **six hours** before your operation, and stop drinking fluids **four hours** before. If your stomach is not empty, there is a risk that you could vomit during the anaesthetic and inhale (breathe in to your lungs) the contents of your stomach. Small quantities of **water** can be drunk until **two hours** before your surgery. You should bath or shower before coming to hospital. If you have been prescribed any medicine to reduce acid in your stomach, it is important that you still take it on the morning of your surgery.

On admission a member of the nursing staff will welcome you. The nurses will look after you and answer any questions you may have. You will be asked to change into a theatre gown. To reduce the risk of blood clots you may be given a blood thinning injection (called Heparin) and some special socks to wear.

A nurse will go with you to the anaesthetic room and stay with you until you are asleep. A needle will be put into the back of your hand to give you the drugs to send you to sleep.

What happens after the operation?

When you wake up a drip (a tube attached to a bag of fluid) will be connected to your arm. This will be removed when you are drinking well. Your blood pressure, pulse and wounds will be monitored closely over the first few hours. You will usually be able to start drinking shortly after the operation and start a soft diet later on. Very occasionally the Surgeon may want to arrange an additional test called a contrast swallow. In this case, when you wake up, you will have some thin tubing coming out of your nose (a naso-gastric tube). During surgery the tube will have been passed down your nose and gullet and positioned in your stomach. In this case you will not be able to eat or drink anything until this test has been done. This test is usually arranged for the day after surgery.

You will experience pain from your wounds; the nurses will give you painkillers to ease your discomfort. In addition you may notice some shoulder pain which is due to the gas inserted into your tummy during surgery. This gas will gradually disappear but the discomfort may persist for several days. Moving around as soon as possible will help prevent gas pains. You will normally be able to get out of bed a few hours after surgery, although the nurses will assist you the first time.

Before your discharge you will be given a supply of painkillers and spare dressings. Your GP will be notified of your treatment.

A follow-up appointment (usually for about six weeks) will be arranged for you, or you can arrange one yourself with my secretary at Bridge Clinic if you prefer.

How much pain can I expect?

It is normal to have incision pain after surgery and your tummy may feel quite bloated and tender. This should start to subside after a few days. To minimise discomfort you should take painkillers **regularly** over the first few days (ensuring that you do not exceed the dose prescribed).

How do I care for my wounds?

After the operation you may have some small plaster-like dressings over each incision. If so, these are usually removed the next day and you can then shower or bathe as normal. The incisions will probably be red and uncomfortable for 1-2 weeks and some bruising and swelling is common. The nurses will give you more detailed information about caring for your wounds before your discharge.

What can I eat after surgery?

It is important to remember that after your surgery, you will not be able to bolt your food or eat large meals. You will need to eat slowly and chew completely. For the first few weeks you may need to eat "soft" food only. Examples of soft food include soup (no lumps) liquidized food, smooth yogurt, ice cream, custard, nutritious drinks, porridge, scrambled eggs and jellies. You should then gradually add other foods that you can tolerate. It is important to be careful when eating bread or meat, as these are the type of things that tend to stick. It is best to avoid fizzy drinks, onions and leeks as these often cause abdominal bloating.

What activities will I be able to do after my surgery?

You can return to normal physical and sexual activities when you feel comfortable and at an individual pace. Avoid heavy or strenuous activities for at least 2 weeks. You can return to work as soon as you feel well enough. This will depend on how you are feeling and the type of work that you do. Typically you will need two to three weeks off work.

You should not drive for at least 7–10 days after surgery. Before driving you should ensure that you can perform a full emergency stop, have the strength and capability to control the car and be able to respond quickly to any situation that may occur. Please be aware that driving whilst unfit may invalidate your insurance.

When should I seek help?

- If you notice large amounts of blood or pus from your wounds.
- If you develop a fever above 101° F (38.5 ° C) or chills.
- Nausea, vomiting or severe pain.
- Severe difficulty in swallowing.
- Severe abdominal distension (bloating of your tummy).
- Increasing pain, redness or swelling around your wounds.

Where should I seek advice or help?

The hospital, Bridge Clinic or your GP.