Laparoscopic Nissen fundoplication

This leaflet explains more about laparoscopic Nissen fundoplication, including the benefits, risks, and any alternatives. It also provides information on what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is a Nissen fundoplication?
A Nissen fundoplication is a surgical procedure used to treat severe gastrointestinal reflux disease (GORD). In patients with GORD, the acidic contents of your stomach flow back into your oesophagus, causing a burning sensation (acid reflux, or heartburn). This occurs because the join between your oesophagus and stomach, the sphincter muscle, is not functioning properly, causing the sensitive oesophageal lining to become irritated. A Nissen fundoplication is a surgical option to relieve chronic reflux symptoms when it cannot be controlled with medication and/or lifestyle changes.

Why should I have a Nissen fundoplication?
This surgery will be discussed with you when other treatments, such as medication, dietary and lifestyle changes, have not been successful in managing your condition. To be considered for this surgery you will have undergone some diagnostic tests or procedures to rule out other causes for your symptoms.

This surgical procedure can relieve the symptoms of GORD where medication and lifestyle changes can’t. If a hiatus hernia (when part of the stomach slides into the chest cavity) is present, this will be repaired at the same time. The upper stomach (fundus) around the oesophagus to make a new valve. Permanent stitches are used for the hiatus repair and to keep the stomach in place. A Nissen fundoplication is reversible through a second operation.

What are the risks?
All operations carry a risk of problems and side effects. Specific risks of this procedure include injury to the oesophagus, stomach, blood vessels or nearby organs. The surgeon may switch to open surgery to repair any damage, however, these complications are rare. You may need further corrective surgery to reduce persistent difficulty in swallowing and/or abdominal bloating. This occurs in approximately 2% of patients (two in 100).

In certain situations, the surgery may need to be repeated due the wrap slipping or becoming loose. A recurrent hernia or wrap migration (movement of the surgical site) may develop if there is excessive retching or vomiting after the operation. These complications may need to be repaired through further surgery. It is important to carefully follow dietary advice and to take any anti-sickness medication given to you to reduce these risks.
Common side effects
The most common side effect is difficulty swallowing. This is common immediately after the surgery (due to swelling) and gradually improves. You will have to eat less, and more slowly, than you did before the operation.

You will need to adhere to the recommended diet of blended, then soft, food for at least four to six weeks. Other common side effects are decreased burping, and increased bloating and flatulence. Most of these symptoms will settle with time.

Are there any alternatives?
The main alternative is continuing to take proton pump inhibitor (PPI) medication to manage your symptoms. Before you are offered surgery, PPI medication and the following alternative treatments will have been discussed with you and trialled.

- Dietary changes, such as having smaller, more frequent portions of food. This puts less pressure on the valve that connects your oesophagus and stomach. Avoiding or cutting down on certain foods can also help, such as coffee or tea (both regular and decaffeinated), fizzy drinks, alcohol, citrus fruits, tomatoes, chocolate, mint or peppermint, fatty foods, spicy foods, onions and garlic.
- Lifestyle changes, such as quitting smoking, exercise and weight loss can also improve symptoms.
- Medication called antacids.

Giving my consent (permission)
We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

What happens before my surgery?
You will be given an appointment for a pre-assessment in the outpatient anaesthetic clinic, where you will be seen by the nurse or anaesthetist. We will take a medical and surgical history from you, check what medications you are taking and your blood results, and make sure you are fit and ready for surgery. You will be asked about your home arrangements and if you have anyone to look after you when you get home.

You will be given instructions about how to fast and prepare for your general anaesthetic, and a plan for which medications to continue and which may need to be stopped before your surgery. You should be given the leaflet, Having an anaesthetic.

Following your pre-assessment, you will be contacted by our booking team with a date for your surgery. They will also tell you where to go on the day of your surgery.

What happens during the Nissen fundoplication?
The operation is generally performed by keyhole (laparoscopic) surgery. The surgeon will make four to five small cuts in your abdomen (tummy) and insert instruments to carry out the operation. A harmless gas (carbon dioxide) is used to inflate your abdomen to make space for the operation to be performed. This will leave your body naturally after the operation.
The surgeon will stitch the hiatus and wrap the top part of your stomach around the lower part of your oesophagus to form a valve. This tightens the closing mechanism at the lower end of the oesophagus, creating a one-way valve which prevents stomach acid from flowing back into your oesophagus. The operation usually takes 60-90 minutes.

There is a chance that the surgeon may need to convert to open surgery. If this occurs, you will have an incision 15-30cm in length on your abdomen.

**Will I feel any pain?**
You may feel some neck and shoulder pain immediately after your surgery due to the gas used to inflate your stomach. You may also feel uncomfortable around the incision site and around the muscles in your abdomen (tummy). You may have mild pain for up to a week after your surgery. You will be given pain relief during the hospital stay and a prescription for painkillers on discharge. Please let a nurse know if you are uncomfortable.

**What happens after a Nissen fundoplication?**
You will wake up in the recovery area. The nurse will check your vital signs and wound sites. As soon as you are comfortable and your blood pressure is stable you will be transferred to the ward. On the ward your progress will be monitored and you will be given pain relief and be encouraged to move.

If you are feeling sick after your surgery you will be prescribed anti-nausea medication and will not be able to eat until the feeling passes. This is to avoid any retching or vomiting which can cause wrap migration. It is important to take any anti-nausea medication given to you, even after you go home. You will normally stay in hospital for one to three days. If you have had open surgery this may be longer.

**Do I need a special diet?**
You should only drink water for the rest of the day after the operation. The next day you can commence a liquid diet, but need to avoid fizzy drinks as burping may be difficult or impossible for a period after surgery. You will need to cut up or blend all of your food for up to six weeks.

You should expect to be able to eat only foods which can be swallowed as a paste without any lumps during this period. If you do not chew foods well or attempt to swallow large mouthfuls there is a risk that they will get stuck, which can be very uncomfortable.

**What do I need to do after I go home?**
The nurses will give you further instructions about pain relief and what to do when you get home.

- You will need to start on soft, small, frequent meals.
- Some patients become constipated and need to take laxatives if their bowels have not opened.
- You can return to non-strenuous activity within a couple of days.
- You may drive again when you can confidently perform an emergency stop, but you should check with your insurance company about when you are covered to drive again.
- You may need two to three weeks or more off work depending on the nature of your job.
- Strenuous activity should be avoided for six weeks.
When to seek medical attention

You should seek medical attention if you experience any of the following symptoms:

- severe chest or abdominal pain
- vomiting and not able to keep any fluids down
- vomiting or passing blood
- difficulty with swallowing (if food gets stuck).

Will I have a follow-up appointment?

You will get an appointment to see the surgeon and/or clinical nurse specialist in the outpatient department approximately six weeks after the operation.

Contact us

If you have any questions or concerns about Nissen fundoplication, please contact the benign upper GI clinical nurse specialist on t: 020 7188 2673, or the relevant surgeon’s secretary via switchboard (Monday to Friday, 9am to 5pm).

Out of hours, please contact the surgical registrar on call. Call the hospital switchboard on t: 020 7188 7188 and ask for the bleep desk. Ask for bleep 0810 and wait for a response. This will connect you to the surgical registrar on call directly.

You should call your doctor if you develop any of the following symptoms:

- fever
- unusual degree of pain
- nausea and vomiting, meaning you are unable to eat properly.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit w: www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline. t: 020 7188 8748, Monday to Friday, 9am-5pm

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

 t: 020 7188 8801 (PALS) e: pals@gstt.nhs.uk
 t: 020 7188 3514 (complaints) e: complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch. t: 020 7188 8815 e: languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day. t: 111 w: 111.nhs.uk