Patient Information for Consent

Mid and South Essex NHS Foundation Trust

UG09 Laparoscopic Nissen Fundoplication

Expires end of April 2025

Local Information

For further information locally you can contact the Patient Advice & Liaison Service (PALS) Team who will be able to put you in contact with the relevant department.

Basildon: Tel 01268 394440
Email mse.pals.btuh@nhs.net

Broomfield: Tel 01245 514130
Email mse.public.response@nhs.net

Southend: Tel 01702 385333
Email mse.pals.suhft@nhs.net

Their opening times are Monday to Friday 11:00am-2.00pm

What is a Nissen fundoplication?

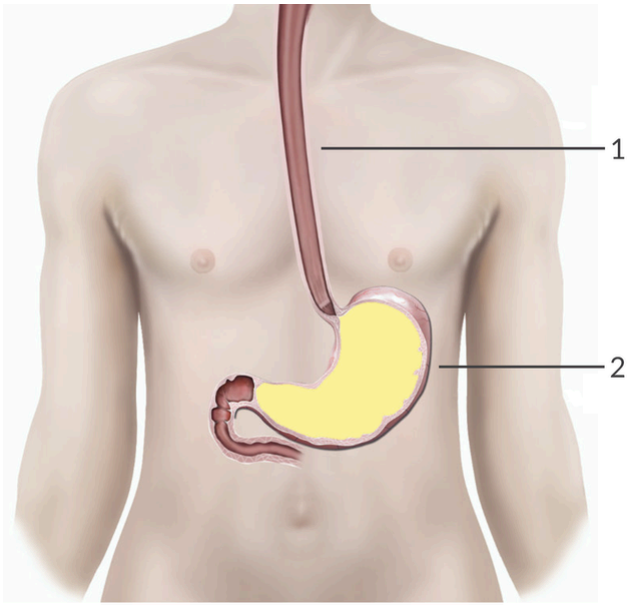
A Nissen fundoplication is an operation to prevent acid reflux, where acid from your stomach travels up into your oesophagus (gullet). It involves wrapping the top part of your stomach around your oesophagus. For this reason, the operation is sometimes known as a 'wrap'.

Your surgeon has suggested a Nissen fundoplication. However, it is your decision to go ahead with the operation or not. This document will give you information about the benefits and risks to help you to make an informed decision.

If you have any questions that this document does not answer, it is important that you ask your surgeon or the healthcare team.

Once all your questions have been answered and you feel ready to go ahead with the procedure, you will be asked to sign the informed consent form. This is the final step in the decision-making process. However, you can still change your mind at any point.

A normal valve



 Illustrator: www.medical-artist.com

1. Oesophagus
2. Stomach

How does acid reflux happen?

At the join between your stomach and oesophagus there is a weak valve that prevents acid from travelling up into your oesophagus.

It is normal for a small amount of acid to travel into your oesophagus. If this happens too often it can cause symptoms of a burning sensation in your chest ('heartburn') or acid (acid reflux) in the back of your mouth. The acid can cause the lining of your oesophagus to become inflamed (oesophagitis) or scarred.

Your oesophagus normally passes through a hole in your diaphragm. Acid reflux is commonly associated with a hiatus hernia, where the diaphragm opening weakens over time and the top of your stomach passes up through the hole in your diaphragm into the chest cavity.

What are the benefits of surgery?

You should get relief from symptoms of acid reflux without needing to take medication.

Are there any alternatives to a Nissen fundoplication?

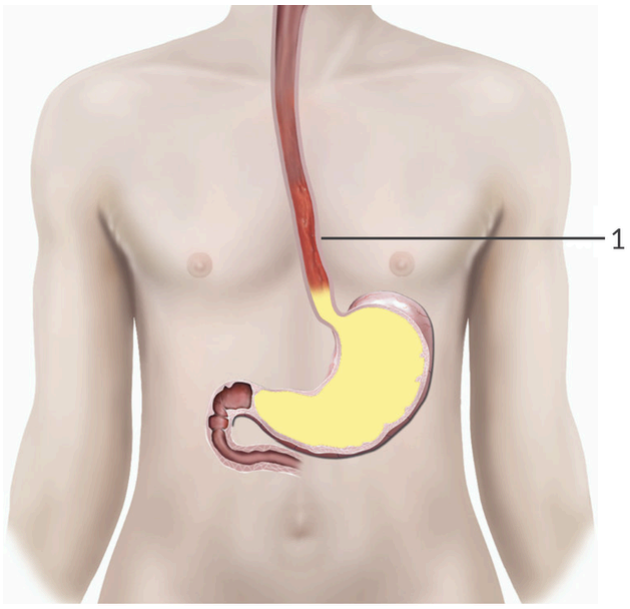
Lifestyle modification is the first line in treatment and can involve avoiding foods that make your symptoms worse, especially late at night. Raising the head of the bed can also help. If you are overweight, it may help to lose weight.

Medication that lowers the acid content in your stomach is effective at controlling symptoms and healing the inflammation in your oesophagus. Medication called 'proton pump inhibitors' is currently the most effective and is the main treatment for acid reflux.

Surgery is recommended only if the symptoms continue while you are taking the medication, or if you feel that you would prefer to have an operation than take medication for the rest of your life.

There are surgical alternatives to a Nissen fundoplication such as a partial wrap and placing magnetic beads around your oesophagus (linx procedure). There is not yet enough evidence for your surgeon to recommend these techniques above a Nissen fundoplication.

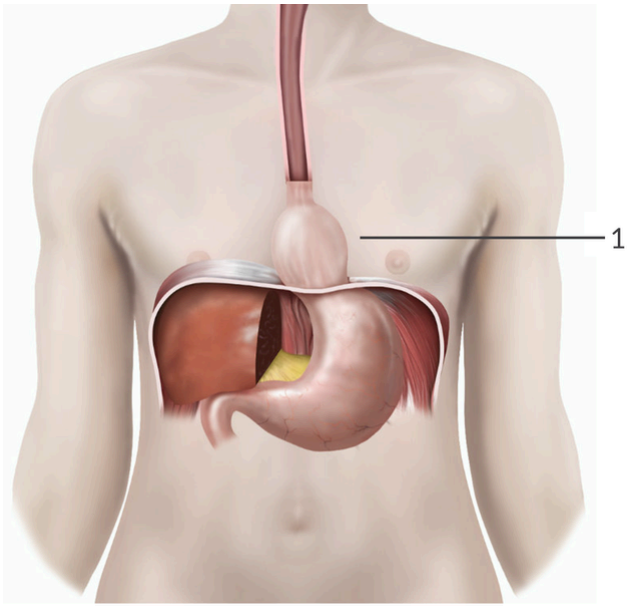
A faulty valve



 Illustrator: www.medical-artist.com

1. Inflammation

A hiatus hernia



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1. Stomach

What will happen if I decide not to have the operation?

Surgery is not essential and you can continue on the medication, particularly if your symptoms are well controlled.

It is important to follow the eating and drinking instructions that your doctor gives you. You should eat smaller meals and avoid chocolate, caffeine and alcohol. Try to eat at regular times and not in the 2 hours before you go to sleep.

What does the operation involve?

The healthcare team will carry out a number of checks to make sure you have the operation you came in for. You can help by confirming to your surgeon and the healthcare team your name and the operation you are having. The operation is performed under a general anaesthetic and usually takes 1 to 2 hours. You may also have injections of local anaesthetic to help with the pain after the operation. You may be given antibiotics during the operation to reduce the risk of infection.

Your surgeon will use laparoscopic (keyhole) surgery as this is associated with less pain, less scarring and a faster return to normal activities.

Your surgeon will make a small cut on or near your belly button so they can insert an instrument in your abdominal cavity to inflate it with gas (carbon dioxide). They will make several small cuts on your abdomen so they can insert tubes (ports) into your abdomen. Your surgeon will insert surgical instruments through the ports along with a telescope so they can see inside your abdomen and perform the operation.

Your surgeon will hold your liver out of the way and free up the upper stomach and lower oesophagus, along with the muscular part of your diaphragm.

They will stitch your diaphragm to reduce the size of the hole your oesophagus passes through.

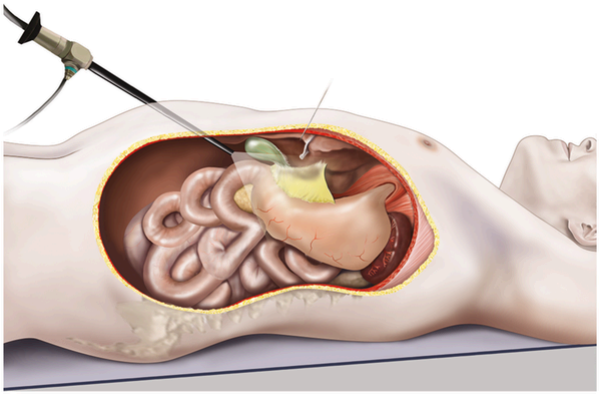
Your surgeon will wrap and stitch the top part of your stomach around your lower oesophagus, to reproduce a valve effect.

For about 3 in 100 people it will not be possible to complete the operation using keyhole surgery.

The operation will be changed (converted) to open surgery, which involves a larger cut on your upper abdomen.

Your surgeon will remove the instruments and close the cuts.

Laparoscopic surgery



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What should I do about my medication?

Make sure your healthcare team know about all the medication you take and follow their advice. This includes all blood-thinning medication as well as herbal and complementary remedies, dietary supplements, and medication you can buy over the counter.

How can I prepare myself for the operation?

If you smoke, stopping smoking now may reduce your risk of developing complications and will improve your long-term health.

Try to maintain a healthy weight. You have a higher risk of developing complications if you are overweight. Your surgeon may suggest you follow a special diet for the 2 weeks before the procedure to reduce the size of your liver. The liver is a large organ that needs to be lifted to perform the surgery safely. If it is smaller, the risk of complications such as bleeding are reduced.

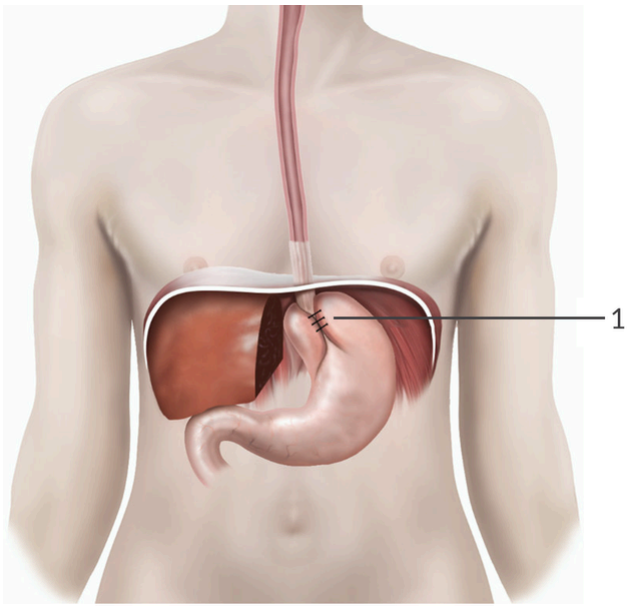
Regular exercise should help to prepare you for the operation, help you to recover and improve your long-term health. Before you start exercising, ask the healthcare team or your GP for advice.

You can reduce your risk of infection in a surgical wound by taking the following steps:

- In the week before the operation, do not shave or wax the area where a cut is likely to be made.
- Try to have a bath or shower either the day before or on the day of the operation.
- Keep warm around the time of the operation. Let the healthcare team know if you feel cold.
- If you are diabetic, keep your blood sugar levels under control around the time of your procedure.

Speak to the healthcare team about any vaccinations you might need to reduce your risk of serious illness while you recover. When you come into hospital, practise hand washing and wear a face covering when asked.

The stomach stitched around the oesophagus



 Illustrator: www.medical-artist.com

1. Wrap

What complications can happen?

The healthcare team will try to reduce the risk of complications.

Any numbers which relate to risk are from studies of people who have had this operation. Your doctor may be able to tell you if the risk of a complication is higher or lower for you. Some risks are higher if you are older, obese, you are a smoker or have other health problems. These health problems include diabetes, heart disease or lung disease.

Some complications can be serious and may even cause death (risk: 1 in 500). Using keyhole surgery means it may be more difficult for your surgeon to notice some complications that may

happen during the operation. When you are recovering, you need to be aware of the symptoms that may show that you have a serious complication.

You should ask your doctor if there is anything you do not understand.

Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

General complications of any operation

- Bleeding during or after the operation. You may need a blood transfusion or another operation.
- Developing a hernia in the scar. This appears as a bulge or rupture called an incisional hernia. If this causes problems, you may need another operation.
- Infection of the surgical site (wound). It is usually safe to shower after 2 days but you should check with the healthcare team. Let the healthcare team know if you get a high temperature, notice pus in your wound, or if your wound becomes red, sore or painful. An infection usually settles with antibiotics but you may need special dressings and your wound may take some time to heal. In some cases another operation might be needed. Do not take antibiotics unless you are told you need them.
- Allergic reaction to the equipment, materials or medication. The healthcare team are trained to detect and treat any reactions that might happen. Let your doctor know if you have any allergies or if you have reacted to any medication, tests or dressings in the past.
- Blood clot in your leg (deep-vein thrombosis – DVT). This can cause pain, swelling or redness in your leg, or the veins near the surface of your leg to appear larger than normal. The healthcare team will assess your risk. They will encourage you to get out of bed soon after the operation and may give you injections, medication, or special stockings to wear. Let the healthcare team know straight away if you think you might have a DVT.
- Blood clot in your lung (pulmonary embolus), if a blood clot moves through your bloodstream to your lungs. Let the healthcare team know straight away if you become short of breath, feel pain in your chest or upper back, or if you cough up blood. If you are at home, call an ambulance or go immediately to your nearest Emergency department.
- Chest infection. Your risk will be lower if you have stopped smoking and you are free of Covid-19 (coronavirus) symptoms for at least 7 weeks before the operation.

Specific complications of this operation

Keyhole surgery complications

- Damage to structures such as your bowel, liver or blood vessels when inserting instruments into your abdomen (risk: less than 3 in 1,000). The risk is higher if you have had previous surgery to your abdomen. If an injury does happen, you may need open surgery. About 1 in 3 of these injuries is not obvious until after the operation.
- Developing a hernia near one of the cuts used to insert the ports (risk: 1 in 100). Your surgeon will try to reduce this risk by using small ports (less than a centimetre in diameter) where possible or, if they need to use larger ports, using deeper stitching to close the cuts.
- Surgical emphysema (a crackling sensation in your skin caused by trapped carbon dioxide), which settles quickly and is not serious.
- Gas embolism. This is when gas (carbon dioxide) gets into the bloodstream and blocks a blood vessel. This is very rare but can be serious.

Nissen fundoplication complications

- Pneumothorax, where air escapes into the space around your lung. Sometimes the air will need to be let out by inserting a tube in your chest (chest drain).
- Making a hole in your oesophagus or stomach (perforation), which needs repairing (risk: 1 in 100).
- Tear of the stitches used for the wrap, if you retch (strain to be sick) or vomit in the first few weeks. This may cause the wrap to become loose. Sometimes a tear can make a hole in your stomach that will need to be repaired by surgery straight away.

- Damage to your liver when holding it out of the way (risk: 5 in 100). If the damage is serious, you may need another operation.
- Damage to your spleen (risk: 1 in 50). Your spleen may need to be removed.
- Difficulty swallowing for a few months because the site where your stomach is wrapped around your oesophagus is inflamed. This is common and you should be able to swallow most foods normally by 3 months.

Long-term problems

- Continued difficulty swallowing where you cannot swallow most foods normally (risk: 5 in 100). If you find that food such as bread and meat get stuck, avoid them.
- Incomplete control of reflux symptoms, if the wrap is not tight enough or becomes loose (risk: less than 5 in 100). This may settle with medication.
- Weight loss during the first 2 months. It is normal to feel fuller than usual and you may be able to eat only small meals. Sit up when you eat and take a drink with your meal to help the food go down. Eat more often than before to try to keep your weight up. If you do lose weight, you will usually put it back on. If you have any concerns about your diet, ask the dietician.
- Abdominal discomfort (risk: 3 to 5 in 10). You will probably not be able to burp as usual, which can cause gas to build up in your abdomen (gas bloat). You may pass more wind than usual.
- Diarrhoea (risk: less than 3 in 100). If loose or more frequent stools are troublesome, your doctor may give you some medication to slow down your bowel.
- Tissues can join together in an abnormal way (adhesions) when scar tissue develops inside your abdomen. Adhesions do not usually cause any serious problems but can lead to bowel obstruction.

If any of these problems are severe and continue for over 3 months, you may need another operation (risk: less than 5 in 100). If you have these symptoms for over 3 months, let your surgeon know.

Consequences of this procedure

- Pain. The healthcare team will give you medication to control the pain and it is important that you take it as you are told so you can move about and cough freely. After keyhole surgery, it is common to have some pain in your shoulders because a small amount of carbon dioxide gas may remain under your diaphragm. Your body will usually absorb the gas naturally over the next 24 hours, which will ease the symptoms.
- Unsightly scarring of your skin.

How soon will I recover?

In hospital

After the operation you will be transferred to the recovery area and then to the ward.

You will be given anti-sickness medication. You will be able to drink from the first day and then you will go on a soft diet. You should no longer need to take your acid-reducing medication.

You may be able to go home the same day. However, your doctor may recommend that you stay in hospital a little longer.

You need to be aware of the following symptoms as they may show that you have a serious complication.

- Pain that gets worse over time or is severe when you move, breathe or cough.
- A high temperature or fever.
- Dizziness, feeling faint or shortness of breath.
- Feeling sick or not having any appetite (and this gets worse after the first 1 to 2 days).
- Not opening your bowels and not passing wind.
- Swelling of your abdomen.
- Difficulty passing urine.

If you do not continue to improve over the first few days, or if you have any of these symptoms, let the healthcare team know straight away. If you are at home, contact your surgeon or GP. In an emergency, call an ambulance or go immediately to your nearest emergency department.

Returning to normal activities

If you had sedation or a general anaesthetic and you go home the same day:

- A responsible adult should take you home in a car or taxi and stay with you for at least 24 hours.
- Be near a telephone in case of an emergency.
- Do not drive, operate machinery or do any potentially dangerous activities (this includes cooking) for at least 24 hours and not until you have fully recovered feeling, movement and co-ordination.
- Do not sign legal documents or drink alcohol for at least 24 hours.

To reduce the risk of a blood clot, make sure you carefully follow the instructions of the healthcare team if you have been given medication or need to wear special stockings.

You will need to eat slowly and chew your food thoroughly. Start with a liquid diet and build up to soft food. You can normally return to a normal diet after 6 weeks. You will not be have to drink fizzy drinks at all.

You should be able to return to work after a few weeks, depending on how much surgery you need and your type of work.

Your doctor may tell you not to do any manual work for a while. Do not lift anything heavy for a few weeks.

Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, ask the healthcare team or your GP for advice.

Do not drive a car or ride a bike until you can control your vehicle, including in an emergency, and always check your insurance policy and with the healthcare team.

The future

You should make a full recovery, with the symptoms of acid reflux gone or much improved.

Summary

Acid reflux can cause heartburn or acid in your mouth. The acid can cause the lining of your oesophagus to become inflamed or scarred. Surgery may be recommended if your symptoms continue while you are taking medication.

Surgery is usually safe and effective but complications can happen. You need to know about them to help you make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

Keep this information document. Use it to help you if you need to talk to the healthcare team.

Some information, such as risk and complication statistics, is taken from global studies and/or databases. Please ask your surgeon or doctor for more information about the risks that are specific to you, and they may be able to tell you about any other suitable treatments options.

This document is intended for information purposes only and should not replace advice that your relevant healthcare team would give you.

Reviewer

Simon Parsons (DM, FRCS)

Illustrator