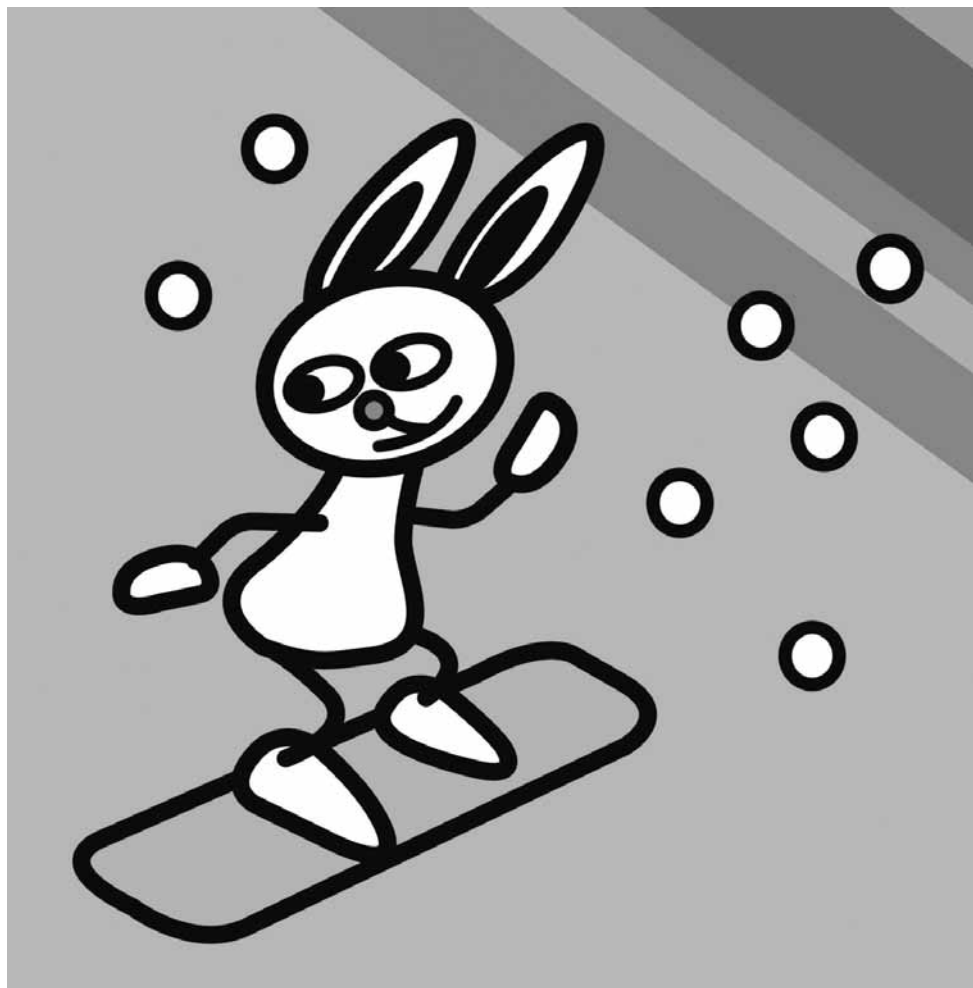


The Children's Hospital

# Nissen's Fundoplication

Information for parents



## Why may an operation be needed?

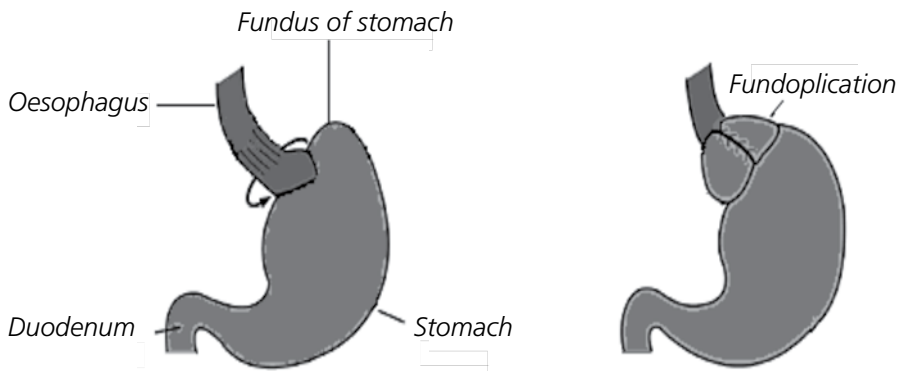
Your child may have experienced reflux symptoms; these include vomiting, tummy pain, chest pain, difficulty in swallowing with food getting stuck, night-time cough, and failure to thrive. Reflux can be described as food and the acid contents of the stomach travelling up the food pipe (oesophagus). Your doctor will have tried to relieve the symptoms with medication and your child may have undergone tests to determine the severity of the reflux problem.

If the reflux problem is severe it can cause damage to the oesophagus by making it bleed, ulcerate or scar. These can eventually lead to narrowing of the oesophagus. To prevent any further damage an operation has been recommended.

## What is a Nissen's fundoplication?

This is the name given to the most common operation to stop reflux. The operation helps to prevent vomiting and reflux by "wrapping" the top part of the stomach around the bottom part of the oesophagus. This tightens the oesophagus and prevents backflow of food and stomach acid.

Although a Nissen's fundoplication is now usually done by keyhole (laparoscopic) surgery, it is a major operation and your child will need to be in hospital for about 3-5 days.



## What are the risks?

Complications are fairly uncommon after this procedure but they can occur and they can be serious.

Problems which may occur during surgery include bleeding, and damage to other organs (e.g. liver, spleen, bowel, oesophagus and stomach). Sometimes the surgeon starts the operation by the keyhole approach but needs to convert to a traditional “open” operation.

Potential problems after the operation include chest infection, wound infections, port site hernia (from the keyhole incision) and adhesions (internal scarring). Overall there is a 5% failure rate of the operation in children with no other medical problems. In children with other disabilities, the failure rate is higher – about 10%.

The exact likelihood of complications depends on your child’s medical condition and on the nature of the surgery your child needs. If your child has neurological problems, the risk of surgery will be affected by their other problems – sometimes the risk can be high in these situations. The surgeon can talk to you about this in detail.

For the anaesthetic risks please see page 5.

## Alternatives

Most babies vomit but the usual pattern is for this to settle during the first year of life. If vomiting persists beyond 18 months, or in children with other major disabilities, the likelihood of vomiting resolving gets less with time.

Medications (e.g. Omeprazole, Ranitidine, Gaviscon) reduce the acid but do not stop reflux. Domperidone is thought to help oesophageal motility (movement of food and fluids down the tube from your mouth to your stomach) but it has not been

proven to stop reflux in children. For persistent vomiting and reflux, fundoplication is the surgical option.

Surgery is usually a last resort in children who have not responded to medical treatment, who have not improved with time, and who have developed complications following their reflux.

## Consent

We will ask you for your consent for the operation to go ahead. If there is anything you are unsure about, or if you have any questions, please ask the doctor before signing the consent form.

## Admission to hospital

You will be asked to come into Tom's or Melanie's ward the day before the operation. This is so that your child can be fully prepared by nursing staff, the doctor and anaesthetist. If your child has already been for a pre-operative assessment, admission will be on the morning of surgery.

## What will happen on the day of the operation?

The operation is done under general anaesthetic. Your child will be asleep throughout the procedure.

### **In the anaesthetic room**

A nurse and parent can accompany your child to the anaesthetic room. Your child may take a toy.

It may be possible to give the anaesthetic with your child sitting on your lap. Your child may either have anaesthetic gas to breathe or an injection through a cannula (a thin plastic tube that is placed under the skin, usually on the back of the hand).

If the anaesthetic is given by gas, it will take a little while for your child to be anaesthetised. They may become restless as the gases take effect. If an injection is used, your child will normally become unconscious very quickly indeed. Some parents may find this frightening.

Your child will then be taken into the operating theatre to have the operation or investigation.

### **Anaesthetic risks**

In modern anaesthesia, serious problems are uncommon. Risks cannot be removed completely, but modern equipment, training and drugs have made general anaesthesia a very safe procedure in recent years.

Most children recover quickly and are soon back to normal after their operation and anaesthetic. Some children may suffer side effects like sickness or a sore throat. These usually last only a short time and there are medicines available to treat them if necessary.

The exact likelihood of complications depends on your child's medical condition and on the nature of the surgery and anaesthesia your child needs. The anaesthetist can talk to you about this in detail before the operation.

## What happens during the operation?

In keyhole surgery, a hole is made in the umbilicus (tummy button) to place the camera, and three other holes (ports) are made for the surgical instruments. The top (fundus) of the stomach is wrapped around the lower oesophagus (see diagram).

Your child will be away from the ward for approximately 2 ½ hours. This includes the anaesthetic time, the operation time and the time that it takes for your child to wake up after the operation.

## After the operation

You will be able to rejoin your child in the recovery room as soon as they are awake. When your child comes back to the ward they will have a drip giving fluids through a vein. This is to prevent them from becoming dehydrated as they will not be able to take all the fluids they need orally for about 24 hours after the operation. The drip will be taken away once your child is fully drinking.

Your child will also have a naso-gastric tube. This tube is passed through the nose and into the stomach. It allows any fluid and trapped wind that collects in the stomach to be removed, helping to prevent retching and vomiting. This tube is usually removed after 24 hours.

We will give your child medicines, such as Morphine, to help with pain relief. This is in the form of a drip called nurse-controlled or patient-controlled analgesia (NCA/PCA), and is used for the first 24-48 hours after the operation, or until your child is comfortable. The doctors and nurses will monitor your child during this time.

Your child may also have a urinary catheter in their bladder if s/he is on Morphine.

The stitches are usually dissolvable. If they are not dissolvable they will be removed in a week. There may also be a dressing over the wound when your child returns from the operation, and this can be taken off the following day.

## When can your child eat and drink?

After a fundoplication, your child can have sips and drinks later the same day if they wish. A light/sloppy diet is started when drinks are tolerated. If your child has had a gastrostomy inserted, feeding is not started until the following day in a regulated manner.

## Possible problems after the operation

This operation is designed to stop vomiting and reflux but it can also stop normal 'burping'. This means that air can get trapped in the stomach and colicky pain may occur. Gradually your child's body will become accustomed to this and your child should learn to swallow less air when eating. Small meals, little and often, may help prevent this. Fizzy drinks should be avoided as they produce gas.

Some children complain that it is difficult to swallow after the operation (dysphagia). This usually settles after a few weeks.

This operation prevents vomiting. Therefore, your child may need special attention if he/she feels sick, has a temperature or diarrhoea. If you notice his/her tummy getting hard or swollen or you have any worries, please contact your GP.

If you notice any redness or swelling (inflammation) at the wound site, please contact your GP.

## Discharge

Your child will be able to go home once they are eating and drinking normally. This is usually 2 or 3 days after the operation. If your child has had an "open" operation, gastrostomy insertion, or has other disabilities, they will be in hospital for longer.

A letter will be sent to your child's GP electronically.

Your child will be followed up in the children's out-patient department. Your clinic appointment will be sent in the post.

## Contacts and telephone numbers

If you have any problems after you get home, please contact your GP. Otherwise, you can phone the ward for advice on:

Tom's Ward	<b>01865 234108</b> or <b>234109</b>
Melanie's Ward	<b>01865 234054</b>
JR Switchboard	<b>01865 741166</b>

## Further information

If you have any questions, or there is anything you don't understand, please ask one of the doctors or nurses.

**We hope that this information is useful to you and would welcome any comments about the care or information you have received.**

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call **01865 221473** or email **PALSJR@orh.nhs.uk**

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