

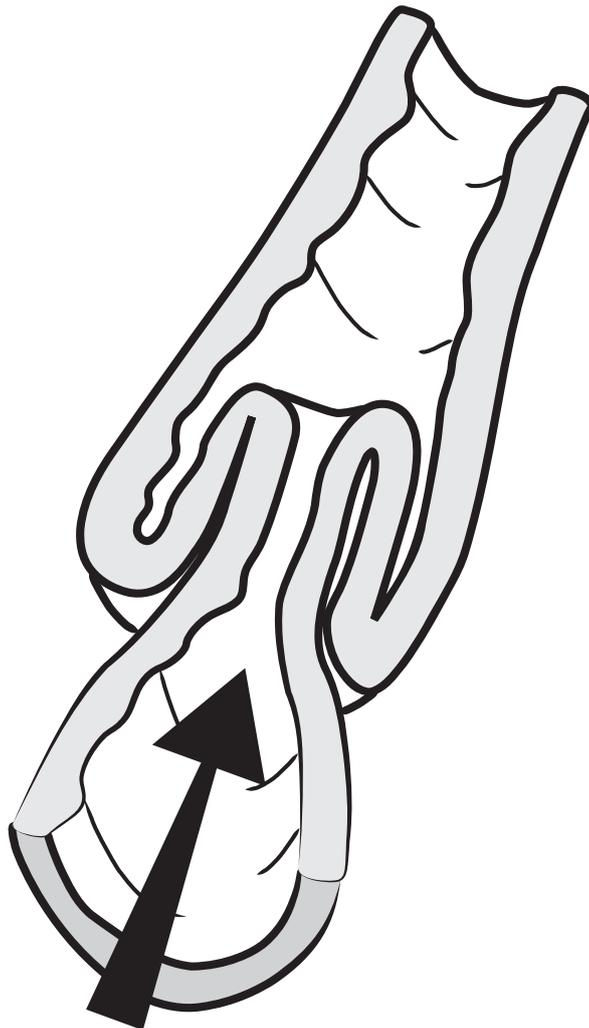


Intussusception

This leaflet explains about intussusception, how it is treated and what to expect when your child comes to Great Ormond Street Hospital (GOSH).

What is intussusception?

Intussusception is a condition where the bowel 'telescopes' in on itself. This causes the bowel walls to press on one another, blocking the bowel. This can lead to reduced blood flow to that part of the bowel. It is a bit like a getting a sock turned inside itself.



Bowel telescoping
in on itself

What are the symptoms?

The main symptom of intussusception is severe abdominal pain that comes and goes. In our experience, the usual cuddles and attention that usually calm your child when upset are unlikely to work when they have intussusception. Each episode (time) tends to last two to three minutes. In between episodes, your child will look very pale, tired and floppy. After 12 hours or so, the pain become more constant, and your child will usually go off food and may vomit. Due to the vomiting, your child may become dehydrated. Symptoms of dehydration include lethargy (tiredness), fewer wet nappies than usual and the soft spot (fontanel) on top of the head being sunken. Your child may also have a high temperature and a swollen stomach. Your child's faeces (poo) may contain blood and mucus.

How is intussusception diagnosed?

Your child's doctor may be able to feel the intussusception by pressing gently on the abdomen to feel for the swollen bowel. An ultrasound scan, like the ones used in pregnancy, will usually confirm the diagnosis.

What causes intussusception?

We are not sure what causes the bowel to telescope in on itself, but there is a link to infections. Your child may have had a cough, cold or high temperature and tummy ache in the days leading up to the intussusception, followed by vomiting or even passing blood



in the faeces (poo). We think that most of the time swelling in the bowel wall makes it telescope in on itself. Less often, there may be a physical reason, such as a pocket in the bowel that might get caught and tangled.

How common is intussusception and whom does it affect?

Intussusception is the most common cause of bowel blockage in infants and young children. It tends to happen between the ages of three and 18 months.

How is intussusception treated and are there any alternatives?

Intussusception can cause reduced blood flow to the affected part of the bowel, which stops it functioning properly, and bruising and damage to the bowel tissue. The effects of intussusception, such as dehydration due to vomiting, can become serious quite quickly in children, so the condition needs emergency treatment.

If your child is dehydrated, they will need a drip of fluids for a while before treatment starts. Your child may also need a nasogastric tube, which is passed up the nose, down the foodpipe and into the stomach. This will drain off the stomach and bowel contents, and 'vent' any air that has built up, which will make your child more comfortable. Your child will also be given antibiotics before treatment starts to reduce the chance of infection.

An air enema is usually the first treatment. In the x-ray department, a tube is passed into your child's bottom and air is released into the bowel. This works by pushing the bowel back, so that the intussusception corrects itself. This is monitored using x-rays. If the enema works well, you will be able to return home once your child is well and feeding normally. For further information on air enema treatment for intussusception, please ask for a copy of our information sheet.

If your child is not well enough to have an air enema, or if the enema did not reduce the intussusception, your child will need an operation under general anaesthetic.

What happens before the operation?

Your child's surgeon will explain the operation in more detail, discuss any worries you may have and ask your permission for the operation by asking you to sign a consent form. An anaesthetist will also visit you to explain about the anaesthetic in more details and options for pain relief afterwards. If your child has any medical problems, please tell the doctors about these.

What does the operation involve?

The operation to correct intussusception is usually carried out using keyhole (laparoscopic) surgery but occasionally the surgeon may use open surgery through a larger incision in the abdomen. They will gently squeeze the bowel to push out the inner segment. They will then examine the bowel to see if there is blood flow to the affected part of the bowel and if it looks healthy. The surgeon will remove any part of the bowel where tissue has died due to the lack of blood flow. The amount can vary, but the surgeon will leave as much bowel as possible. If bowel needs to be removed, the surgeon may change from using keyhole surgery to open surgery.

Are there any risks?

All surgery carries a small risk of bleeding during or after the operation. There is a chance that the bowel could be damaged during the operation, but this is very rare. If bowel damage occurs, this can be fixed in the same operation. There is a small risk of infection but this is minimised by giving your child antibiotics before the operation. Every



anaesthetic carries a risk of complications, but this is very small. Your child's anaesthetist is an experienced doctor who is trained to deal with any complications.

After treatment, either with an air enema or surgery, there is a chance that the intussusception will happen again. In our experience, this happens in about five children in every 100, but is more likely in the first few days after treatment. If your child develops intussusception again, it can be treated in the same way as before.

What happens afterwards?

You child will come back to the ward to recover where we will monitor them closely. They may be connected to monitors to check their breathing, heart rate and oxygen levels. Your child will have been given pain relief during the operation, but this will begin to wear off. For the first few days, pain relief will usually be given through a 'drip' and then, when your child is more comfortable, in the form of medicines to be swallowed.

Your child will not be able to feed initially to allow the bowel to recover. They will continue to have a drip of fluids and the nasogastric tube to drain off the stomach contents. As they begin to recover, usually in the first couple of days, your child will be able to feed again, starting with small amounts and increasing the amount as tolerated. When your child's bowel has recovered completely, you will be able to feed them solids. The doctors will let you know when this is likely.

Your child will be able to go home once they are feeding well. This is usually a week or so after the operation.

When you get home

Your child's abdomen may feel sore for a while after the operation, but wearing loose clothes can help. Your child will need to have regular pain relief for at least three days, and we will give you the medications to take home with you. As well as the medications, distracting your child by playing games, watching TV or reading together can also help to keep your child's mind off the pain.

The stitches used during the operation will dissolve on their own so there is no need to have them removed. If possible, keep the operation site clean and dry for two to three days to let the operation site heal properly. When your child has a bath, do not soak the area until the operation site has settled down. You may need to come back to hospital for an outpatient appointment. We will send you the date in the post.

What is the outlook for children with intussusception?

The outlook is good, with the majority of children having no further bowel problems.