What is an epigastric hernia?
An epigastric hernia is a protrusion of fat from just outside the tummy cavity through a small hole in the muscle fibres of the tummy wall. They often cause pain, as when the child moves these fibres rub against the fat or cause it to twist upon itself. These hernias tend to increase in size as the child becomes older, and there may be more than one. They are nearly always in the middle of the tummy, between the umbilicus and the lower part of the breast bone. The body can never repair one of these hernias.

What is an umbilical or para-umbilical hernia?
An umbilical hernia is a protrusion of some of the contents of the tummy into the umbilical area ('belly-button'). It is a very common problem but only rarely causes pain. Often the hernia will repair itself as your child becomes older, but this is much less likely to happen after 4 years of age. Sometimes the hernia appears to be umbilical but may in fact be immediately alongside the umbilicus. These hernias are called 'Para-umbilical hernias' and although very similar to a true umbilical hernia, always need to be repaired as the body cannot repair them itself.

General description
The aim of the procedure is to repair the hernia. Although strong stitches are used, these do eventually dissolve and it is the body’s own scar tissue which forms the long-term strength of the repair. The operation is performed as a day-case under general anaesthesia. Generally the operation takes about 30 minutes.

Anaesthesia
You and your child will meet the anaesthetist on the morning of the procedure. After talking to you and briefly examining your child, they will take you through to the operating theatre. One parent is welcome to accompany your child until they are asleep. The anaesthetist puts your child to sleep via a face mask (with children 5 years and over there is the option of either a face mask or a needle with numbing cream). You will then be shown the waiting room where there is tea, coffee or chilled water available to drink. Once your child is asleep, the anaesthetist will insert a ‘drip’ to allow fluids to be given directly into a vein. Usually this is located in the hand or arm, but occasionally may need to be sited in the leg or scalp.
Procedure

The tummy area is cleaned with an antiseptic solution. A local anaesthetic block is injected into the area so that the site of the operation is numb after the operation. This block usually lasts for about 4 to 6 hours.

For umbilical and paraumbilical hernias a cut is made in the umbilicus. Once the communication between the tummy cavity and the umbilicus has been found, it is opened and any contents returned to the tummy cavity. The weakness is then repaired with several stitches.

Usually the skin is closed with dissolving stitches which are buried under the skin. Sometimes there may be excess skin which needs to be removed before the wound is closed. A piece of cotton wool is then placed in the umbilicus against the skin and a water resistant dressing applied over the wound.

For epigastic hernias a cut is made directly over the site of the swelling. The fatty tissue is removed and the hole in the muscle fibres repaired using several stitches. The skin is closed with dissolving stitches buried under the skin and a clear water resistant dressing applied.

Initial recovery

After the operation has finished, your child will be taken to the recovery area. Once awake, you will be called into the recovery ward. Often children appear mildly distressed and a little confused initially – there may be several reasons for this including residual effects of the anaesthetic, hunger and some discomfort. Generally they will settle quite quickly, especially if offered a drink or feed. The recovery and ward staff are also able to give pain relief medication once your child is awake and this is sometimes required. The nursing staff will check the wound and make sure you are happy before you go home. Usually this will be about 2 hours after the surgery.

Post-operative course

There may be a small amount of blood that oozes from the edges of the dressing. Paracetamol (‘Panadol’) should be given on the afternoon and evening of surgery, and in the morning of the following day. After that time, assess your child’s pain to see if further doses are required. Older children may require a stronger medication such as ‘Painstop Daytime’ or ‘Painstop Night-time’ if over one to two years of age. Follow the manufacturer’s dose instruction but never give more than 4 doses in a 24-hour period and never both at the same time.

Your child should not be bathed on the first night. Showers are safe from the next day onwards but remember to protect the dressing with a plastic bag or piece of ‘Glad Wrap’. There may be a small amount of blood that oozes from the wound under the dressing in the first 24 hours. Generally the dressing does not need to be changed, but if you are concerned please discuss with your local doctor or the hospital. You should remove the dressing completely after a long bath on the 7th to 10th day after the operation. No further dressings are then required. There may be some bruising and swelling around the wound after the surgery. This is quite normal but may not settle for several weeks after the surgery.

Your child can begin eating when they get home. Start with clear liquids (apple juice, iceblocks) and add solid food slowly and in small amounts. Your child may vomit from the anaesthesia on the day of surgery. This should stop by the morning after surgery.

Return to activity

Your child may return to day care or school when comfortable, usually within 3-5 days. They should not participate in sports or swimming for 3 weeks after the surgery.

Call our office if:

- You see any signs of infection: redness along the incision site, increased swelling, foul smelling discharge from incision
- Your child’s pain gets worse or is not relieved by painkillers
- There is bleeding (small ooze of blood in the first day or two is normal)
- Your child has a high temperature
- Vomiting continues on the day after surgery
- You have any questions or concerns

Follow-up

Normally I see you and your child about 3 to 6 weeks following surgery. This is both to ensure that the wound has healed and that you and your child are satisfied with the results of the operation. For patients from rural areas, this review may be deferred to your own general practitioner if you prefer. Please ring soon after the operation to book the post operative appointment to arrange a convenient time.

Problems & further surgery

Generally this procedure is straightforward, but there is a 5% chance that the hernia may not resolve completely following the surgery. In this situation a further operation may be required. As with any surgical procedure, there is always a 2-3% risk of a wound infection or bleeding after surgery. Often parents are concerned that the umbilicus is not inverted following the procedure (an ‘ingoing belly button’). This is a cosmetic issue only and does not indicate that the repair has been unsuccessful. The goal of surgery remains the repair of the hernia.