Paediatric inguinal hernia repair

Information for parents and carers

What is an inguinal hernia?

A tunnel is present in the groin before birth, for passage of the blood vessels and the tube that carries the sperm (the vas) from the testis (in boys), or a ligament to the labia (in girls). If this tunnel fails to close, the abdominal contents can bulge through it, causing a lump in the groin. This is called an inguinal hernia.

An inguinal hernia appears as a bulge or lump in the groin. In boys, this lump is usually caused by a loop of the intestine (bowel), and can extend into the scrotum. In girls the lump can contain the intestine (bowel) or ovaries, and can extend to the labia.

If your child has an inguinal hernia, this can be dangerous, and will need to be treated with an operation. If the bowel remains trapped outside the abdominal cavity it can become damaged, requiring an emergency operation. The testicle can also be damaged by the poor blood flow to the area. To prevent these complications, your child needs to have the hernia repaired.

How is it treated?

The operation involves a small cut in the groin over the area of the hernia, to close the tunnel.

Your surgeon may also recommend repair of the hernia by key-hole (laparoscopic) surgery. In this case your child will have a small incision by his tummy button and two smaller ones lower down on either side of the abdomen.

What are the benefits of surgery?

The benefit is that your child will no longer have the hernia. This will prevent the serious complications listed above.

Are there any alternatives?

If your child is diagnosed with a hernia, surgical treatment is the only option. The hernia will not get better without surgery.

What does the operation involve?

The operation is carried out under general anaesthetic; your child will be asleep during the operation.

Once your child is asleep the surgeon will make a small incision (cut) in the groin and find the hernia sac and separate if from the blood vessels and the sperm tube (vas deferens) in a boy. Any bowel will be moved back into the abdomen and the

hernia sac will be tied off with a stitch and the cut on the skin will be closed with dissolvable stitches.

For a laparoscopic (key-hole) operation the surgeon will small cut near the tummy button and insert a thin camera to inspect the hernia, and two tiny cuts for insertions of tiny instruments to be inserted to repair the hernia. This keyhole type of operation is especially useful with hernia affecting both sides, when the diagnosis is unclear or for recurrent hernias. The opposite side of your child's groin will also be inspected internally and if a hernia opening is present it can be treated at the same time.

What preparation is needed?

Your child may be given a paediatric preoperative assessment. This is where you and your child will see the nurse, who will carry out a number of checks to make sure that he or she will be fit and well on the day of their operation. Occasionally the nurse will have to carry out other tests before the operation, but this will be discussed with you.

The nurse will be able to tell you about the operation, and answer any questions you may have.

We can tell you what you need to bring to hospital. You will have the opportunity to look around the ward where your child will be staying. The play specialist is also available at this clinic to talk to you and your child about going to the anaesthetic room and to help you both overcome any worries or concerns that you may have.

What happens on the day of the procedure?

Your child should have **no** solids or formula milk feed for **6 hours prior** to anaesthesia. If your child is breastfeeding, the last feed should be **4 hours prior** to the anaesthetic. Clear fluids may be given up to 2 hours before anaesthesia. You will be informed of the scheduled timing of your child's operation.

Please follow the fasting instructions given to you by staff.

When can my child resume activities?

Your child can resume normal activities as soon as they feel able. They will restrict their own activity if they suffer any discomfort. Give them regular pain killers such as paracetamol and ibuprofen for the first 48 hours. Your surgeon will let you know if they want your child to be restricted in terms of any other activities such as using 'ride-on' toys.

School age children may need to remain off school for 48 hours and should avoid sport for 14 days, and contact sports for 4 weeks.

Are there any risks or complications?

As with all procedures, there are some risks from having this operation.

General risks

Anaesthetic complications:

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 complication. The Royal College of Anaesthesia states that throughout the lifetime of an individual they are 100 times more likely to suffer serious injury or death from a traffic accident than from an anaesthetic. After an anaesthetic some children may feel sick and vomit. They may have a headache, sore throat or feel dizzy. These side effects are usually short-lived and not severe.

You will have the opportunity to speak to an anaesthetist before the operation.

Pain: This is usually minor, and can be managed with pain killers you will be given to take home.

Bleeding: This is usually minor and is stopped during the operation. Very occasionally patients develop a collection of blood called a haematoma, which may require a second operation.

Infection: All surgery has a risk of infection, but is uncommon after this operation. If the wound becomes red, hot or weeps, or your child feels unwell you should consult your doctor.

Scarring: There is usually a visible scar at the site of the incision. This is small and usually heals well. Rarely the scar can overgrow and need further attention.

Risks specific to herniotomy.

Testicular ascent: This occurs when scar tissue under the skin pulls the testis up into the groin. This will require another operation to bring the testis back down to the scrotum.

Injury to structures around the hernia: Damage to structure in and around the hernia (bowel, ovaries, nerves, bladder) are rare. Your surgeon is also trained in dealing with complications.

Damage to the tube that carries sperm: This can occur while it is being separated from the hernia sac, but is very uncommon. This usually would not affect your child's fertility or testosterone production as the remaining testicle will continue to function normally.

Testicular atrophy: There is a small risk of damage to the blood vessels to the testes while it is being separated from the hernia sac. If this occurs, the testicle on that side may become smaller, or very rarely it may shrink away. This usually would not affect your child's fertility or testosterone production as the remaining testicle will continue to function normally.

Recurrence of hernia: This is uncommon. If it happens your child will need further surgery to fix it.

Further Information

This information was produced using the latest evidence available.

Further details are available upon request.

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