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# ORCHIDOPEXY

# What is an undescended testis?

An undescended testis is when the testis is not fully down in the boy's scrotum or sac. The testis first develops near the kidney when the baby boy is inside the mother's womb. For the testis to drop down into the scrotum there needs to be a passage through the groin area. Sometimes the testis remains inside the tummy cavity, but much more commonly it becomes stuck in or close to the groin passage. An undescended testis is common at birth, especially in premature boys. The testis may 'drop' of its own accord in the first 3 months of life, but is very unlikely to do so after this time. The testis needs to be located in the scrotum in order for it to be kept cooler then the rest of the body and to produce normal sperm when the boy is older. Ideally this operation should be performed around 6 months of age. In some boys the testis may have been in the correct position at birth but then later rises out of the scrotum. This is termed the Ascending Testis Syndrome and is also quite common.

### **General description**

The aim of the procedure is to fix the testis in the scrotum. The operation is performed as a day-case under general anaesthesia. Generally the operation takes about 45 minutes. If the testis is located in the tummy cavity the operation will usually be performed using 'keyhole' or laparoscopic surgery. This may take 60 minutes and may require two operation about 3 months apart.

## **Preparations**

Your child will need to fast for all solids and milk liquids generally for about 6 hours before the start of the procedure. In breast-fed babies or infants this time may be reduced after consultation with the anaesthetist.

Water may be allowed up to 2 hours beforehand. You will be called by the hospital approximately 48 hours prior to surgery to be advised of your admission and fasting times. It is often helpful to bring your child's favourite toy with you on the day.



Empty left side of scrotum

## Anaesthesia

You and your child will meet the anaesthetist prior to 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 to a waiting room. It is very important that you remain available in this area during your child's surgery so that we can quickly contact you in an emergency.

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 groin area and scrotum 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. A cut is made in the groin on the side of the undescended testis, with a second smaller cut at the bottom of the scrotum on the same side. Once the testis has been found, it needs to be carefully mobilised so that it can be brought into the scrotum. This will often involve removing a small hernia near the testis. The hernia must be peeled off two important tubes: the blood vessel to the testis and the sperm tube. This usually allows the testis to be placed in the scrotum. The wounds can then be closed with dissolving stitches which are buried under the skin in the groin but which will be visible in the scrotum. A clear water resistant dressing is then placed over each wound.

If the testis is very high in the groin or inside the abdominal cavity, a laparoscopic orchidopexy may be performed. This involves inserting a small telescope through the umbilicus, with typically two further incisions about 5mm in size in the lower in the abdomen for special instruments to enable the testis to be mobilised into the scrotum. If the blood vessel to the testis is very short, occasionally two operations approximately 3 months apart may be required for the best chances of success.

## **Initial recovery**

Once the operation has finished, your child will be taken to the recovery area. When they are awake, you will be called into the recovery ward. Often children appear 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 additional pain relief medication once your child is awake if 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.

As a result of the local anaesthetic nerve block, your child may complain of a numb sensation in the groin and in some cases some weakness in the leg on the side of the surgery. This is temporary and will generally settle within a day or so of the operation.

#### **Post-operative course**

There may be a small amount of blood that oozes from the edges of the dressing, enough to lightly stain a nappy or pair of underpants. Paracetamol ('Panadol') should be given regularly for the first 48 hours after surgery. Children over 12 months of age may require additional pain relief with ibuprofen ('Neurofen'). Follow the manufacturer's dose instructions for your child's weight. Paracetamol (no more than 4 doses in 24 hours) and ibuprofen (no more than 3 doses in 24 hours) can be given together if required. Older boys may also require additional analgesia with codeine. My anaesthetist will provide you with a prescription for this medication if it is required.

Your child should not be bathed on the first night, but nappies can be changed as required and a 'wet-wipe' or similar cloth used. Showers are safe from the next day onwards after the dressings have been covered by plastic wrap such as 'Glad Wrap' or 'Cling Film'. 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 myself. It is



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quite normal for the scrotum and testis to swell after the operation and there may also be some bruising. This represents the body's normal response to the operation and settles within the first few weeks. You should remove the dressing completely after a long bath on the fifth day after the operation. No further dressings are then required.

Your child can begin eating when he gets 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. He should not participate in sports or swimming for 3 weeks after the surgery and should not ride straddle toys (bikes, walkers) for 2 full weeks after surgery. You should continue to use your car seat.

#### Call the 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 wounds have healed and that you and your son are satisfied with the results of the operation. Please ring soon after the operation to book the post operative appointment to arrange a convenient time. Boys are normally followed up for about 2 years after their surgery to make sure that the testis stays down as the boy grows.

#### **Problems & further surgery**

Generally this procedure is straightforward, but there is a 5-10% chance that the testis may not stay in the scrotum following surgery. In this situation a further operation will be required, usually about 6 to 12 months after the first procedure. During the operation there is a very small risk (less than 1%) of damage to the blood vessels to the testis and the sperm tube. This risk is minimised by the use of magnification during the procedure and usually can be both detected and repaired at the time of operation should this occur. As with any surgical procedure, there is always a 2-3% risk of a wound infection or bleeding after surgery. Any boy that has had an orchidopexy should wear a box when playing cricket. Also, after puberty, boys should be instructed to perform testicular self examination on a monthly basis because of the increased risk of testicular cancer in a previously undescended testes.