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SURGERY FOR IMPALPABLE UNDESCENDED TESTICLE

Family information leaflet

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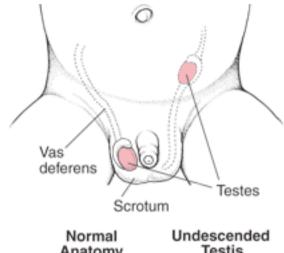


Orchidopexy

This leaflet explains about orchidopexy surgery for an impalpable (cannot be felt) undescended testicle, and what to expect when your child comes to Bristol Children's Hospital for treatment.

What is an undescended testicle?

An undescended testicle or testis is one that has not reached the normal position in the scrotum (sac). One (unilateral) or both (bilateral) testicles can be affected. For some boys, although a testicle is in a high position at birth, it comes down naturally by a few months of age. When this does not happen, we considered the testicle to be undescended. Some undescended testicles are palpable and can be felt, usually in the groin (please see the separate information leaflet). Others are impalpable and cannot be felt.



Anatomy

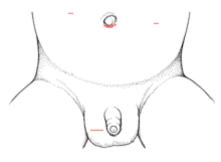
Testis

Why does this happen?

When a boy is developing in his mother's womb, his testicles are formed in his tummy (abdomen) near his Kidneys. They then travel down through the tummy and the groin to the correct position in the scrotum. If this does not happen, it can be for a number of reasons. In some cases, the testicle did not form properly or even at all. For other boys, a testicle formed but its blood supply was interrupted, often by a twist of the testicle, and the testicle disappeared completely or shrivelled to a small bit of tissue. In other cases, the testicle stopped somewhere along the route from high in the tummy down to the scrotum. This can be due to hormone issues (eg lack of certain hormones), mechanical problems (eg low pressure in the tummy), genetic factors (some genetic conditions are associated with undescended testicles) or prematurity (undescended testicles are more common in babies that are born early). However, in most cases we don't know the exact cause.

Why is surgery necessary?

If a testicle remains undescended by six months of age, it is very unlikely to come down to the correct position by itself. Testicles work best at the cooler temperature found in the scrotum and their function can be affected if they remain in the groin or abdomen after the first few years of life. All men need to be able to examine their testicles on a regular basis, and this is most easily done if the testicles are in the scrotum. If an undescended testicle is left inside the abdomen, there is an increased risk of testicular cancer but the testicle cannot be seen or felt to check for this. Some boys prefer the appearance of their scrotum with two testicles inside it.



Possible Incisions

What does the surgery involve?

Surgery takes place at Bristol Children's Hospital. It is usually done as a day case so that most children will come in, have their operation, and go home the same day, although they will be at the hospital for most of the day. The operation involves a general anaesthetic and has several stages. Your son will be examined once he is asleep and occasionally, we can feel a testicle in the groin that we couldn't feel whilst he was awake. If this is the case, we will proceed to groin orchidopexy to bring the testicle down from there. If we still cannot feel the testicle, we will proceed to laparoscopy. This involves a small cut just under the belly button and a camera is put into the tummy to look for the testicle. Two other very small cuts are usually needed for the operating instruments.

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There are four possible things we can find once we look in the tummy:

- I. No testicle. The testicle either did not form at all or was once there but has now died and disappeared. We would end the operation at this point and close the tummy button wound. If a boy has a normal testicle on the other side he will develop normally, have normal fertility and go through puberty in the normal way.
- 2. **Testicular remnant** found. If the testicle is only partially formed or has shrunk to a very small size and we do not think it will contribute towards his development or fertility, we will remove it. It has been shown that the testicular tissue left behind can turn cancerous later on in life so it is important to remove non-functioning tissue.
- 3. Well-formed testicle found low down in abdomen. Depending on how far down the testicle has made it from the tummy to the scrotum we can sometimes bring it down in one operation (a 'one-stage' procedure). This requires a cut in the scrotum and the testicle is brought down and fixed in the scrotum. It is always a possibility that the testicle can move back up again, but usually to the groin rather than back in the abdomen. This would need a further operation.
- 4. Well-formed testicle found but unable to bring down in one operation. If the testicle is too high in the abdomen, it is usually the blood vessels that are holding it back. In this case, we would cut the blood vessels to the testicle and leave it six months for an alternative blood supply to grow. Your son would then need a second operation to bring the testicle down into the scrotum at that stage. Cutting the blood vessels to the testicle does mean a small risk that the testicle will not survive the procedure. As the alternative to this would be to remove the testicle altogether, this procedure gives the testicle its best chance of survival.

Dissolving stitches and skin glue will be used which do not need to be removed. The glue looks white and scabby but will fall off when ready.

What happens before the operation?

On the day of admission to hospital, the surgeon will visit you to explain about the operation in more detail, discuss any worries and ask you to sign a consent form giving your permission for the operation. They will draw a mark on your child to indicate the side to be operated on. Another doctor will also visit you to explain about the anaesthetic and options for pain relief after the operation. A member of the nursing team will talk to you about the after care.

If your child has any medical problems, particularly allergies and constipation, please tell the doctors about these. Please also bring in any medicines your child is currently taking.

Are there any risks?

All surgeries carry certain risks. Although this is quite a routine procedure potential problems are those of bleeding or wound infection following the surgery (rare), damage to structures in the area we are operating (rare), failure of the procedure and re-ascent of the testicle (rare) or indeed, in the worst case scenario, loss of a testicle (also rare). Re-ascent and/or loss of the testicle can happen in roughly I boy in 20 when the testicle can be bought down with one operation, and I boy in 5 when two operations are needed.

It can happen that in time as your boy grows, the testicle will ride up again from its position in the scrotum into a high position again, which may require a repeat procedure to be done.

There are also certain small risks associated with a general anaesthetic, which the anaesthetist will discuss with you on the day. In general these surgeries and anaesthetics are very routine and safe.

What happens afterwards?

Once your son's operation is completed, he will return to the ward when awake. He will be able to drink straight away and eat shortly after although children can often feel groggy, sick or be upset after a general

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anaesthetic. He will be monitored for a short time after by nursing staff on the ward, usually around 2-3h. Most procedures are done as a day case. When the nursing staff are happy that your son has recovered, and you are happy with the after care, you will be allowed home. If you are to stay overnight, one parent will be allowed to stay.

Before discharge, arrangements may be made for you to return to outpatient clinic or for further surgery if necessary.

Your son can have a bath or shower from the evening after surgery. This should be a quick in and out wash and use plain water rather than bubble bath or soap on the area for a week. Boys should avoid swimming for four weeks and heavy contact sports such as rugby for six weeks. Those who have had scrotal surgery should avoid sitting astride things such as bicycles or ride on toys for four weeks.

Boys with only one testicle

One working testicle is all that is needed for function including fertility and puberty. If you only have one testicle however, that testicle is very precious. Encourage your son to let you know if he gets any pain or problems with his testicle and if he did, please seek urgent medical attention. If, when he is older, your son is unhappy with the appearance of his scrotum with only one testicle, a testicular prosthesis is a possibility. Most boys that have grown up with only one testicle are not concerned about the cosmetic appearance.

Trouble shooting

What if ... Action

There is a small amount of blood Press firmly on the wound for 5 minutes (it is useful to time this).

If the oozing continues, telephone for advice.

The wound opens up If either wound opens a little, keep the area clean and dry. Make

an appointment with your GP to review the wound or contact the Consultant's secretary to arrange a review at the hospital. In the unlikely event that a wound opens fully, contact the ward or on call

registrar for a surgical review.

You are concerned that the testicle brought It may be possible to bring forward your outpatient appointment. down has moved up again

Contact your Consultant's secretary to discuss this.

Contact information:

For advice 8am – 6pm: Ward 36 Nursing staff 0117-342-8336

For advice 6pm - 8am: Ward 31 Nursing staff 0117-342-8331

or: On call surgical registrar 0117-342-7756

For follow up queries: Consultant Urologist's secretary 0117-342-8840