



Undescended testicles

This leaflet explains about undescended testicles, how they can be treated and what to expect when your child comes to Great Ormond Street Hospital (GOSH).

What are undescended testicles?

This is when your child's testicles are not in their usual place in the scrotum. While your child is in the womb, the testicles are developing inside his abdomen. Towards the end of pregnancy, the testicles travel through a passage into the scrotum. Both testicles should be in the scrotum by the time your child is one year old. Generally, only one of the testicles is affected, but on rare occasions, both testicles fail to travel to the scrotum.

In some children, the testicles may be in the scrotum for much of the time but cannot be felt there because they naturally rise back into the body through fear or cold temperatures. You can usually find this out by putting your child in a warm bath and checking whether you can feel both testicles. If this is the case, there is no cause for concern.

What are the symptoms of undescended testicles?

Usually, there will not be any symptoms at all, other than not being able to feel the testicles in the scrotum. Your child will not be in pain, and the undescended testicles will not interfere with any bodily function. However, if one of the testicles becomes twisted (testicular torsion) it will be painful. The pain will be either in the groin area or the abdomen, depending on the location of the testicle at the time.

How are undescended testicles diagnosed?

Your child's doctor will need to determine whether the testicles are truly undescended or whether they have slid back into the body temporarily. This is usually done by feeling the abdomen and the scrotum.

What causes them?

On rare occasions, the testicle does not descend due to other problems with the testicles themselves or with the male hormones. We do not know exactly why this happens, but it is not due to anything that happened during pregnancy.

How common are they?

This condition is more common in premature babies. Around one in 20 male babies is born with an undescended testicle. In about one in 70 cases, the testicle remains undescended.

How are undescended testicles treated and are there any alternatives?

The method of treatment depends on the suspected cause. If the doctors suspect the testicles have not descended due to a hormone problem, they may suggest a short course of a hormone called human chorionic gonadotrophin (hCG). This is more likely to be suspected if neither testicle has descended. For more information about this, please see our *hCG test* leaflet available from your ward



team, the Pals office or our website. If the doctor does not suspect a hormone problem, or if the testicles remain in the abdomen after the hormone treatment, your child will need a short operation under general anaesthetic called an orchidopexy.

Undescended testicles are best treated in early childhood, usually between 1 and 1½ years of age. Your child's testicles will need treatment as they do not seem to mature properly if left in the abdomen. The amount of sperm and fertility levels seem lower in men who have had undescended testicles, and even lower if they were not treated early in childhood. This is because the testicles need to be a few degrees cooler than the rest of the body to produce sperm.

Children with undescended testicle have a higher risk of testicular cancer in the future. It is more easy to check the testicles if they are in the scrotum. If the testicles remain in the abdomen or high up in the groin, this also increases the risk of testicular torsion.

What is an orchidopexy?

This is an operation to bring the testicles down from the abdomen to their usual place in the scrotum. This is a short operation under general anaesthetic, lasting about 45 minutes. Sometimes the operation needs to be done in two stages about six months apart. In many cases, the operation(s) can be done as day surgery – your child will arrive at the hospital, have the operation and be able to go on the same day. Occasionally, a child will need to stay in hospital overnight.

What happens before the operation?

For many operations at GOSH, you and your child will need to come to a pre-admission appointment shortly before the operation is scheduled. The purpose of this is to check that your child is well enough for the operation. It is also an opportunity to meet the surgeon again and ask any questions you might have.

Your child's surgeon will explain the operation in detail, discuss any worries you may have and ask you to give permission for the operation by signing a consent form.

Your child should not have anything to eat or drink beforehand for the amount of time specified in the letter. It is important to follow these instructions – otherwise your child's operation may need to be delayed or even cancelled. An anaesthetist will visit you to explain your child's anaesthetic in more detail. If your child has any medical problems, like allergies, please tell the doctors.

What does the operation involve?

The orchidopexy can either be carried out using open surgery or keyhole (laparoscopic) surgery, depending on the position of the testicle. While your child is under general anaesthetic, the surgeon will move the testicle down into the scrotum, and close up the passage through which the testicle should have travelled, to stop the testicle moving back into your child's abdomen.

On rare occasions, the surgeon will find that the testicle has not formed properly or has been damaged while in the abdomen. If this is the case, he or she will remove the damaged testicle and might secure the healthy one in the scrotum to ensure your child's remaining testicle remains in place and can develop in the normal way.

Are there any risks?

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. All surgery carries a small risk of infection or bleeding. After the operation there will be some tenderness in the groin area. Occasionally there may also be some swelling and bruising. There is a small risk that the testicle may be damaged during the operation. This is more likely to occur if the testicle could not be felt while in the abdomen.



The testicle may not grow well following the operation but this will be checked at your child's post-operative appointment.

What happens afterwards?

Your child will come back to the ward to recover, and will be able to go home once he has had something to eat and drink and is comfortable. We will telephone you the following day to check your child is making a good recovery. Please tell the nurse the best time to contact you before you leave the ward.

Your child may feel sick for the first 24 hours. You should encourage, but not force, him to drink plenty of fluids. It does not matter if he does not feel like eating for the first couple of days, as long as he is drinking plenty of fluids.

Your child will have been given pain relief during the operation, but these will begin to wear off. Your child will need to have regular pain relief, such as paracetamol for at least three days, so please make sure that you have some at home. As well as medicine, distracting your child by playing games, watching TV or reading together can also help to keep your child's mind off the pain.

Your child's groin will probably feel sore for a while after the operation and will look bruised and swollen. This will improve in the days following the operation. The stitches used during the operation will dissolve on their own so there is no need to have them removed. There may also be Steri-strips® which will fall off within five to seven days and skin glue which gradually flakes away over the same time period.

If possible, keep the operation site clean and dry for two to three days to allow the operation site heal properly. If your child needs to have a bath or shower, do not soak the area until the operation site has settled down.

Your child should not ride a bicycle or other sit-on toy for one month after the operation,

as the area may still be uncomfortable and it will also prevent the testicles from travelling back up into the abdomen. Your child should be able to go back to school within a couple of days, when he is more comfortable.

You and your child will need to come back to hospital for an outpatient appointment about three months after the operation. We will send you the appointment date in the post.

What is the outlook for children with undescended testicles?

When the undescended testicles are treated in early childhood, the outlook is good. Your child will have normal fertility levels unless there were problems with the testicles themselves. If a damaged testicle was removed, leaving one healthy testicle, this should not affect your child's fertility levels in later life to any great degree.

You should call your family doctor (GP) or the ward if:

- your child is in a lot of pain and pain relief does not seem to help
- your child is not drinking any fluids after the first day back home
- the operation site is red or inflamed, and feels hotter than the surrounding skin
- there is any oozing from the operation site.

If you have any questions, please call 020 7405 9200 and ask for the ward from which your child was discharged.