

Patent processus vaginalis (PPV)/ Hydrocele

Information for parents



Leeds children's
hospital

What is it?

When boys are developing in their mother's womb their testicles develop inside the boy's own abdomen. They descend down into the scrotal sac and pull some of the lining of the abdomen next to them creating a pathway. In girls a ligament runs from the abdomen to the labia and can also leave a pathway. This pathway is supposed to close before the baby is born. If it does not then an abnormal connection between the abdomen and the scrotum or labia exists which, when small, can allow fluid collect within. The swelling you may see around the testes or in the groin is this fluid.

How do we know my child has one?

This is usually a clinical diagnosis and it is rare that clinicians used to seeing children need to do any scans.

Is it associated with any other health problems?

While hydroceles can happen with other conditions, the majority of them are in otherwise normal children.

Why and when should my child have an operation for it?

In some children hydroceles do not appear to cause symptoms; others may get pain from a hydrocele that develops rapidly. This situation commonly occurs due to straining (e.g. when going to the toilet and constipation). Generally, hydroceles are not required to be operated on urgently and commonly are left to a child is several years old. The reasons behind operating on hydroceles at all are potentially related to testicular and sperm development later in life but the evidence for this is limited.

Is there any alternatives to an operation?

As mentioned above some children who have hydroceles will improve over the first few years of life and do not require

an operation. However, in some they persist and for optimal testicular and sperm development in addition to the ability to self-examine later in life for abnormal lumps an operation may be offered.

What happens in the operation?

Most hydroceles are done 'open' through a small cut in the 'bikini line' groin crease. The scars from these usually fade away to give a good cosmetic result. The surgeon works their way down to the pathway that the fluid is popping in to and ties it off.

What are the risks?

This is a common operation and for most children the risks are low. All operations have a risk of bleeding and infection, there is no special risk with this operation. All operations have a risk of damaging nearby structures: the nearby structures we take special care around with boys in this operation are the blood vessels and sperm tube to the testicle on the side of the operation. It is very rare for the sperm tube to be damaged: if it does the surgeon may or may not be able to repair it at the time. If the blood vessels to the testicle are damaged it can lead to the testicle being small. Even when a boy only has one normal testicle their development and fertility are essentially normal. Finally it is worth noting that there is always a risk of the hydrocele recurring: this risk is around 1 in 100. Recurrence can happen shortly after the operation or further down the line. If this happened the child would require a further operation to repair it.

What about the anaesthetic?

Hydrocele repairs in children are nearly always done under general anaesthetic. On the day of the surgery the anaesthetist will discuss the details of this with you.

Local anaesthetic will also be given either directly into the wound or via a form of nerve block to make your child more comfortable after surgery.

How do I look after my child after?

You can pick them up, cuddle them and treat them normally from immediately post operatively. In bigger children we advise against sports for 4 weeks after surgery. They shouldn't need more than paracetamol and/or ibuprofen to control their pain (if your child doesn't have any special reason why they can't take these medicines). The wound will have dissolvable stitches in and so nothing needs taking out. There may also be paper "stitches" applied over the top of the wound. Try to keep the wound clean and dry for 2-5 days after which your child can shower/bathe normally. Any dressings applied should ideally be kept in place for about 2 days; if they are still on at a week after surgery please do bathe the wound and take the dressing(s) off.

Will I be followed up?

Not usually as this should be a fixed problem. If however you do experience problems you can either visit your local GP or get in contact with us through the main hospital switchboard on **0113 243 2799** and ask to be put through to the ward you were looked after on or the secretary of the surgeon who did your operation. Do bear in mind there is a limit to what staff will be able to advise on without seeing your child. If your child is unwell and you need help as an emergency you should get them to your nearest A&E.