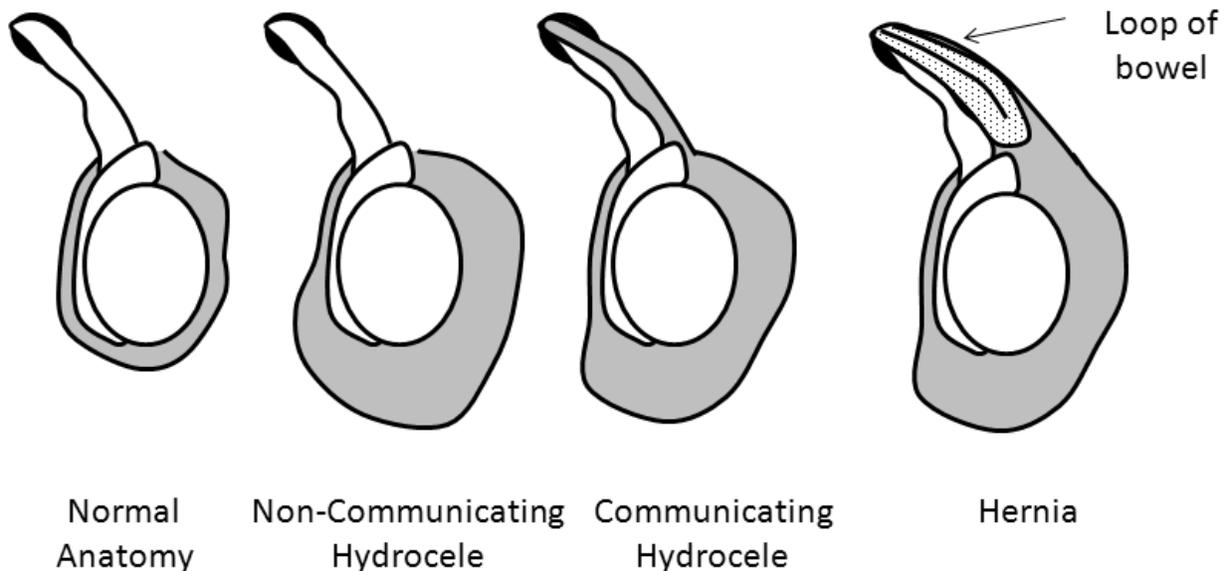


Hydroceles & Hernias

What is a Hydrocele?

A hydrocele is a collection of watery fluid around the testicle. This is a common problem in newborn males and usually goes away within the first year of life. Normally during fetal development, the testicles descend from the developing baby's abdominal cavity, (belly) through the groin into the scrotum. As they travel down, a sac accompanies each testicle, allowing fluid to surround the testicles.



The sac usually closes off and the fluid is absorbed, but sometimes the sac doesn't close (communicating hydrocele) or the fluid fails to be absorbed (non-communicating hydrocele). In unusual instances, the hydrocele fluid can be the result of abdominal inflammation, or a testicular problem (injury, torsion, infection, tumor). Sometimes the hydrocele may not be in the scrotum, but in the spermatic cord which is located in the area above it.

What is the treatment?

Often times the hydrocele will go away on its own in the first year of life and does not require treatment. We will consider treatment if:

1. The hydrocele is very large or causes symptoms.
2. A large non-communicating hydrocele still persists after 2 years of age.
3. A communicating hydrocele that is persistent. If it does not spontaneously resolve after age 1 year, there is a risk of a hernia developing.
4. The hydrocele indicates that there might be another problem. Hydrocele may also develop in reaction to another problem such as torsion, inflammation, infection or rarely a tumor.

Correction of hydrocele in children is done through a groin incision. For cases in older children and adolescents where we are confident there is no groin communication a scrotal incision is sometimes used. The surgeon makes certain there is no hernia sac or another underlying problem and then removes the watery fluid. The lining around the testicle is re-oriented to try to minimize the chances of recurrence. Complications include bleeding, infection, pain, and recurrence of the hydrocele.

What is a Hernia?

The extension of the abdominal sac that passes into the groin is called the processus vaginalis. This usually closes off by the time of birth. If it remains open, fluid can pass down into the groin and scrotum in boys to form a hydrocele. If the sac is wide enough, it can allow other abdominal contents such as intestine or fat (also in girls, tube or ovary) to travel down. These structures can pass in and out of the hernia sac, but sometimes they get stuck (incarcerated hernia).

Inguinal hernias occur in both sexes but are more common in boys. About 1-4 boys in 100 have them. (1-4%). The condition is more common in premature babies – 30 out of 100 babies (30%) with very low birth weights have them. Hernias favor the right side but may occur on both sides.

The usual hernia is a lump or bulge in the groin or scrotum. , Usually, it does not cause any symptoms, but sometimes it can cause pain, fussiness, or even bowel obstruction. Although the hernia contents usually pass back into the abdominal cavity from time to time (reduction of the hernia), the sac itself does not disappear, so the hernia should be fixed surgically. Most hernias are repaired electively, meaning the hernia is diagnosed and the surgery can be planned in advance.

Sometimes the hernia becomes trapped and cannot easily be moved back into place (incarcerated hernia). This may cause much distress. If the hernia cannot be reduced, it should be immediately evaluated in the Emergency Room and corrected surgically.

A hernia can become strangulated, meaning it cuts off the blood supply to the small intestine. This may lead to death of the intestine tissue and is a life-threatening situation. A strangulated hernia causes a number of severe symptoms such as pain, fever and a visible bulge in the abdomen (belly).

How are Hernias corrected?

A hernia is also corrected through a groin incision. The surgeon separates the sac from the area around it. The sac is then tied off where it originates from the abdominal cavity. Pediatric hernias (indirect inguinal hernias) are usually different from adult types (direct inguinal hernias) which tend to have a muscle weakness that must be fixed. Muscle repair is rarely necessary for pediatric hernias. Complications of hernia surgery include:

- bleeding
- infection
- recurrence of the hernia, include hydrocele formation,
- injury or damage to other parts of the scrotum.

With any groin or scrotal operation, there is always a small chance that the testicle could be damaged or lost.

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