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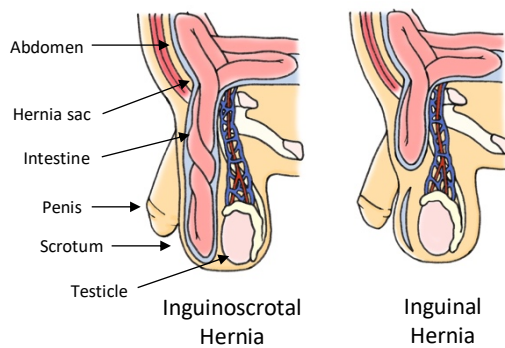
Inguinal Hernia

An inguinal hernia happens near the groin area, between the belly and the thigh. With boys, you can often see a swelling in the scrotum. Does this mean girls are off the hook? Not exactly. Although girls don't have testicles, they do have an inguinal canal and can get hernias, too. About 3-5% of healthy, full-term babies are born with an inguinal hernia. In premature infants, the incidence is substantially increased—up to 30%!

If an inguinal hernia is not treated, it can cause serious problems. Learn more about the signs and symptoms of this condition and what to expect if your child needs hernia repair surgery.

What is an inguinal hernia?

The story of the inguinal hernia begins during a baby's development. When a baby boy is growing in the womb, the testicles first grow in his belly. As he develops, his testicles travel down a tunnel into the scrotum. (This tunnel also exists in baby girls). Occasionally, the tunnel (*called processus vaginalis*) does not close, leaving an opening from the belly into the inguinal canal where a piece of bowel or an ovary can become trapped.



Artist: Elizabeth J. Trimble

When this happens, what should stay safely behind the abdomen can pass through and enter the groin - fluid, intestines, or other tissues. To avoid potential complications, inguinal hernias require surgery to repair.

How do I know if my child has an inguinal hernia?

Hernias can occur at any age but are most common in newborns but may not be noticeable for several weeks or months after birth. **When your child has an inguinal hernia, you can usually see a bulge in the groin or scrotum.** The bulge will typically come and go. It may get bigger after your child is straining or crying. It may go away or get smaller during the night while your child is asleep or relaxed. (Straining and crying do not cause hernias despite some myths).

NEVER ignore signs of pain or distress or any bulge in an infant or child. Call your doctor as soon as possible for a professional opinion.

- If the bulge becomes trapped even when your child relaxes, it may mean that organs from inside the belly are trapped inside the hernia. This is called “**incarcerated hernia**” and requires immediate medical attention. Your child will likely have pain or feel tenderness (or even have vomiting). The bulge may also become much firmer or even red when this happens.
- If the blood supply of the contents of the hernia is cut off, it is called “**strangulated hernia.**” These symptoms include severe pain, vomiting, no appetite, redness or bruising around the bulge, and sometimes fevers and bloody stools.
- This inguinal hernia is frequently confused with a more benign condition, a [communicating hydrocele](#).

What is the difference between an inguinal hernia and a hydrocele?

A **hydrocele** is a fluid filled sac in the groin or scrotum. Hydroceles can look like inguinal hernias, but no bowel or tissue is found in the sac. Fluid is made inside of the belly, so if there is a connection between the hydrocele and the inside of the belly, fluid can move back and forth from the scrotum into the belly, leading to change in size of the scrotum (“communicating hydrocele”). Swelling of the hydrocele may cause pain and tenderness to that area. A hydrocele does not require surgery right away unless it causes pain. Most can be watched until 12 to 18 months of age. If it is still large at that age, some doctors will recommend surgery since it may affect the growth of the testicle and...sometimes there may actually be a hernia.



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Will any tests need to be done to see if my child has an inguinal hernia?

Most of the time, a doctor can diagnose an inguinal hernia by what he or she sees when examining your child—seeing a bulge in the groin when your child cries or strains and seeing it disappear when your child relaxes.

When what the doctor sees is different from what you have seen at home, or if the bulge is always there and the doctor is worried that it might be a mass and not a hernia, an [ultrasound](#) can be done to help make the proper diagnosis. However, ultrasounds are not always necessary.

How is an inguinal hernia treated?

Surgery is needed to fix the inguinal hernia. Once a hernia is noticed, your doctor will refer your child to see a [pediatric surgeon](#) or a [pediatric urologist](#) for the procedure. Surgery will be scheduled to close the tunnel. The timing of the surgery depends on the severity of the symptoms and the type of hernia. An incarcerated hernia needs to be taken care of immediately.

What type of surgery is done?

In hernia repair surgery, a small incision is typically made near the bulge and the contents of the hernia are pushed back into the abdomen. The inguinal tunnel where the organs are exiting from the belly (hernia) is closed.

- **If a laparoscopic (scope) approach is used:** Small cuts are made on the belly allowing the scope and instruments to be inserted to see and repair the hernia.
- **If bowel is trapped in the hernia (incarcerated or strangulated):** The surgeon will first ensure that the blood supply to the bowel has not been cut off for too long. If it has, a small piece of bowel may need to be removed and the bowel sewn back together.

This surgery generally takes between 30 minutes to 1 hour.

What should I expect on the day of the hernia surgery?

Before surgery, you will meet the anesthesiologist. Inguinal hernia surgery is typically done under a general anesthetic although a regional anesthetic can be used. Your child will be asleep during the procedure. See [Anesthesia and Children: The Day of the Procedure](#) for more information.

As soon as your child wakes up after surgery, someone from the recovery room will call you and you will be able to be with your child again.

Your child may have some pain where the incisions were made. Some surgeons inject medicine at that area to control pain or an anesthesiologist may inject medicine in the lower back (“caudal block”). Your child may also be given pain medicine to take at home.

When can we go home?

Typically, hernia repair surgery is an outpatient or “same day” surgery—meaning your child gets to go home a few hours after recovery. However, if your child has a medical condition or is a premature infant, an overnight stay may be required for observation and safety.

When it is safe for your child to go home you will review at-home care with your nurse or doctor.

How do I care for my child at home?

Home-care instructions can be different depending on the hospital or surgeon, age of the child, and how complex the surgery was. However, some general principles may be similar:

- Most children can eat a regular diet right after surgery.
- Recovery time depends on the child. Most can go back to normal, non-strenuous activities in about 1-2 weeks.
- Your child will be restricted from bathing for 2-3 days post-surgery. Your surgeon may give you different or more specific instructions.

When should I call the doctor’s office?

You will receive specific instructions for follow-up with the surgeon when your child goes home after surgery, however, here are some key reasons to call:

- Bleeding or drainage from the incision
- Redness around the wound(s)
- Fever above 101 F
- Vomiting
- Less peeing than usual or fewer wet diapers than usual

What problems might my child have as a result of having an inguinal hernia?

Having an inguinal hernia in one groin may increase the chance of a hernia on the other side.

The surgeon will talk to you about how to care for this possibility.

After an inguinal hernia repair, most children do not have problems with this again. But rarely, a hernia can come back, and a surgeon will need to see your child again.

Additional Information:

- [Assessment and Management of Inguinal Hernia in Infants](#) (AAP Clinical Report)
- [Inguinal Hernia](#) (NIH.gov)