



Your Child's Hernia

About Hernias

You have been told your child has a hernia. A hernia is a hole in the abdominal wall. Most childhood hernias develop in the womb. But they may not be found until a child is of school age.

There are many types of hernias. The three most common are inguinal hernias, umbilical hernias and epigastric hernias. The information that follows is about those three hernias.

It's possible for any hernia to become trapped or stuck. In medical terms it is called an incarcerated hernia. This happens when tissue or fat becomes stuck in the opening of the hernia so that blood can't flow to it. Signs of this may include a hard lump that is tender or that your child appears to be in more pain. Another sign may be that your child is not drinking and eating as he or she normally does.



If you think your child has an incarcerated hernia, contact your child's health care provider right away. If you are not able to reach your child's health care provider right away, get emergency medical care for your child.

If you have any questions or concerns after you read this information, talk with your child's health care provider.

Inguinal Hernia

About four percent of healthy, full-term babies are born with an inguinal hernia. Inguinal hernias are more common in babies who were born early. And they are more common in babies when a family member also had an inguinal hernia as a baby. See Figures 1 and 2.

For boys, an inguinal hernia happens during fetal development. The testes develop in the abdomen. After they develop, they drop, or descend, into the scrotum. This happens around the seventh month of pregnancy. As the testes drop through the lower abdominal wall, they pass through the inguinal canal. After the testes reach the scrotum, the opening through which they pass should close. If the hole does not close, a hernia develops.

Because girls don't have testes, it is not known why girls get inguinal hernias. However, the opening in the lower abdominal wall allows ligaments to support the uterus.

An inguinal hernia happens when part of the intestine or fat bulges through a ring-like opening in the lower abdominal wall. For girls, it can also happen if an ovary passes through. In both boys and girls, if the opening in the lower abdominal wall does not close correctly before the baby is born, an inguinal hernia may develop. This means there is still an opening in the abdominal wall which will not close on its own. Over time, the muscle around the inguinal canal gets weaker.

Inguinal hernias usually happen on the right side. Some children may have more than one hernia, which can affect both sides.

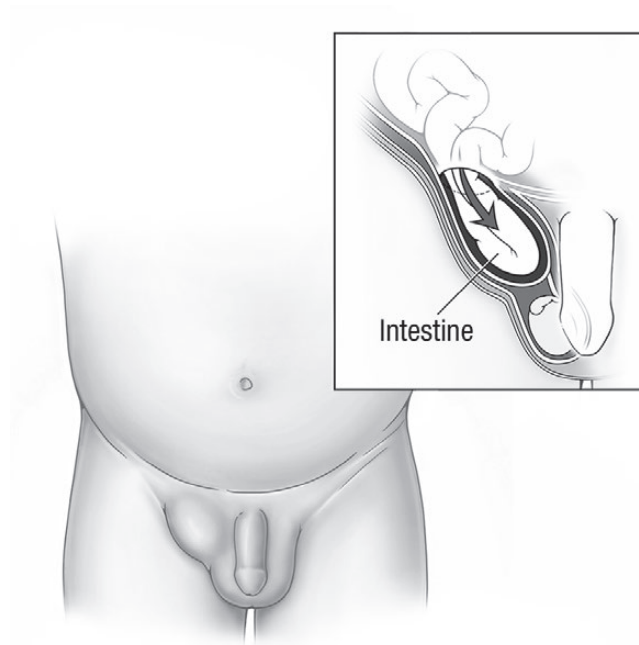


Figure 1. Inguinal hernia (boy)

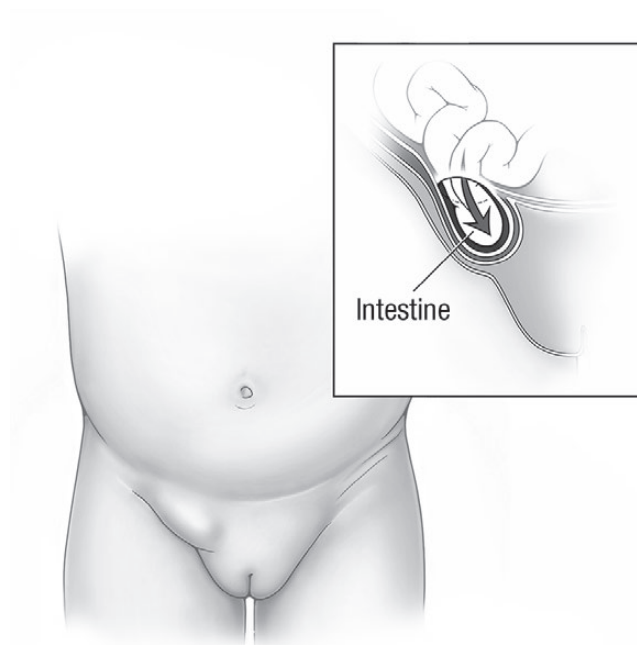


Figure 2. Inguinal hernia (girl)

Signs and symptoms of an inguinal hernia

Some children may show no signs or symptoms of their inguinal hernia. Some children have pain and others do not. Some children may have a bulge or swelling in the groin area. In boys, the hernia may extend all the way into the scrotum. This may cause the testicle to look bigger. See Figure 1. In girls, it may extend toward the labia, or it may stay in the groin as a small bulge. See Figure 2.

In many cases, the bulge or swelling may be seen only when the child is crying or straining, such as when he or she passes stool. This is because the child is putting pressure on the hernia. However, neither crying nor physical activity causes inguinal hernias.

Treatment for an inguinal hernia

Surgery is recommended for all children who have an inguinal hernia. These hernias do not go away with time. And, without repair, inguinal hernias can get bigger and can cause more pain. Inguinal hernias are also at risk for getting stuck (incarceration).

Most children have this surgery as an outpatient, which means they do not stay overnight at the hospital.

Your child gets general anesthesia for this surgery. He or she won't feel pain during surgery and won't remember the surgery. Your child has a breathing device in place during surgery.

Two types of incisions can be done to repair a hernia. During open surgery, the surgeon makes an incision near the hernia. During laparoscopic surgery, he or she makes an incision near the belly button.

The type of surgery depends on your child's condition and needs. For both surgeries, the hernia sac is removed. The weak area on the abdominal wall is repaired as well. The incision is closed with stitches.

Ask your child's health care provider how to get your child ready for surgery. Read preparation instructions you are given. If you have any questions about preparation, surgery, or recovery, be sure to ask.

See "Care After Surgery" for information about recovery.

Umbilical Hernia

An umbilical hernia can happen as a baby develops in the womb.

During your baby's growth in the womb, the abdominal wall developed a weak spot. Tissue or fat passed through this weak spot and then through the navel, where the umbilical cord was. Usually the weak spot closes after birth. But, for some babies it doesn't.

About one in five children is born with an umbilical hernia. These hernias are more common in babies born early or with low birth weight. They are also more common in babies who have a family member who had an umbilical hernia.

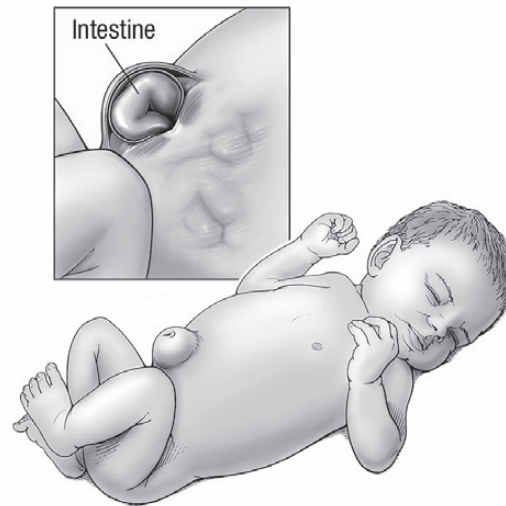


Figure 3. Umbilical hernia (infant)



Figure 4. Umbilical hernia (ages 4 to 5 years old)

Signs and symptoms of an umbilical hernia

An umbilical hernia is usually a soft bulge of tissue around the navel area. It causes the belly button to bulge. It may be a small bulge, like the size of a pea or a bulge up to the size of a plum. See Figures 3 and 4.

You may notice the bulge is bigger when your baby cries, coughs, or when he or she puts pressure on that area, such as when your baby passes stool.

Treatment for an umbilical hernia

There are few risks with an umbilical hernia. Usually an umbilical hernia that appears before a child is six months old closes on its own by the time the child is three or four years old. Larger umbilical hernias may take longer to close.

Surgery usually is not needed unless the hernia does not heal by the time your child is five years old. However, surgery may be needed if the hernia becomes more painful, larger, or incarcerated.

If your child needs surgery, it is usually as an outpatient, which means your child does not stay overnight at the hospital.

Your child gets general anesthesia for this surgery. He or she won't feel pain during surgery and won't remember the surgery. Your child has a breathing device in place during surgery.

Two types of incisions can be done to repair a hernia. During open surgery, the surgeon makes an incision near the hernia. During laparoscopic surgery, he or she makes an incision near the belly button.

The type of surgery depends on your child's condition and needs. For both surgeries, the hernia sac is removed. The weak area on the abdominal wall is repaired as well. The incision is closed with stitches.

Ask your child's health care provider how to get your child ready for surgery. Read preparation instructions you are given. If you have any questions about preparation, surgery, or recovery, be sure to ask.

See "Care After Surgery" for information about recovery.

Epigastric Hernia

An epigastric hernia can happen while a baby develops in the womb.

During your baby's growth in the womb, the abdominal wall developed a weak spot. Over time, a bulge of tissue or fat came through that weak spot. See Figure 5.

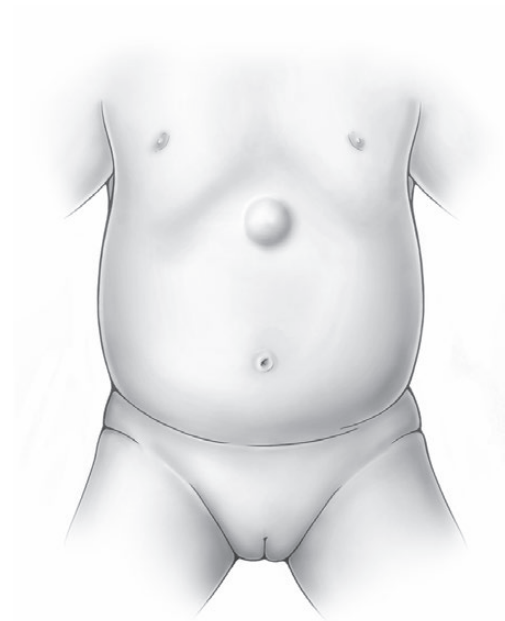


Figure 5. Epigastric hernia

Signs and symptoms of an epigastric hernia

An epigastric hernia happens between the belly button and the chest. This is called the midline of the body. It may look like a small lump, or you may not be able to tell it's there. See Figure 5. There may be one epigastric hernia or two or more.

Your child may or may not feel pain from the hernia. If your child has pain from the hernia, it may hurt more when he or she passes stool or when he or she puts pressure on that area. This pain should lessen or go away when your child is able to relax again.

Treatment for an epigastric hernia

Surgery is recommended for all children who have epigastric hernias. Epigastric hernias don't go away with time. And, without repair, epigastric hernias can get bigger.

Your child's surgery is likely to happen within a few months after diagnosis. If your child feels pains from the hernia, surgery may be sooner.

Most children have this surgery as an outpatient, which means they do not stay overnight at the hospital.

Your child gets general anesthesia for this surgery. He or she won't feel pain during surgery and won't remember the surgery. Your child has a breathing device in place during surgery.

Two types of incisions can be done to repair a hernia. During open surgery, the surgeon makes an incision near the hernia. During laparoscopic surgery, he or she makes an incision near the belly button.

The type of surgery depends on your child's condition and needs. For both surgeries, the hernia sac is removed. The weak area on the stomach wall is repaired as well. The incision area is closed with stitches.

Ask your child's health care provider how to get your child ready for surgery. Read preparation instructions you are given. If you have any questions about preparation, surgery, or recovery, be sure to ask.

See "Care After Surgery" for information about recovery.

Care After Surgery

The following information may help your child make a more comfortable and faster recovery after hernia repair.

Activity

Because your child had general anesthesia, he or she may struggle with memory, slower reaction time and may not have the best judgment for the first 24 hours after being sedated. Your child may feel tired, dizzy, weak, and irritable. Because of this, your child should rest for the rest of the day. And a responsible adult should stay with your child.

Your child may do quiet activities. Do not let your child do activities that cause him or her to put pressure on the abdomen. Do not let your child do the following:

- Tumble, jump or take part in other highly active play
- Ride a bicycle or ride on similar toys
- Use in-line skates
- Lift anything heavy

Ask your child's health care provider when your child can go back to normal activities.

Incision care and bathing

The material used to close the incision depends on the type of repair your child had. Talk with the care team about your child's incisions.

A dressing or bandage was placed over the incision site. Leave the dressing in place and keep it dry until your child's surgeon tells you differently.

Typically, the stitches dissolve, or "melt away," about five to seven days after surgery. This means the stitches do not need to be removed.

Follow instructions your child's care team gives you about bathing. Talk with the care team about when your child can soak in water, bathe, or go swimming.

Discomfort

Your child may have some discomfort after the surgery. For several days, he or she may feel pain or soreness. Your child may have some swelling as well. To help with discomfort, your child may:

- Take a pain reliever, such as acetaminophen or ibuprofen. Follow the instructions that come with the medication.

Note: Some common pain relievers can affect blood thinning, such as aspirin, aspirin-containing products, ibuprofen (Advil™, Motrin™), and naproxen (Aleve™, Naprosyn™). Talk with your child's health care provider before your child takes these pain relievers.
- Apply a cold pack to the incision site. This may help lessen discomfort and swelling. Place a towel between the skin and the cold pack when doing this.

Diet

Your child may resume his or her usual diet when ready. Encourage your child to drink extra fluids and eat foods that are high in fiber. This may help to help avoid constipation.

When to contact your child's health care provider

Contact your child's health care provider if your child has:

- Signs of an infection:
 - Temperature of 100.4 degrees Fahrenheit (38 degrees Celsius) or greater.
 - Chills.
 - Increased tenderness, redness or swelling around the wound.
 - Increased pain, or pain not relieved by pain medications.
 - A bad-smelling odor or new or increased drainage coming from the site.
- Trouble passing urine or stool.

Follow-up appointment

Your child's health care team may want your child to come in for a follow-up appointment. This usually is set up to take place one to two weeks after surgery. At this appointment, the incision is checked to see that it has healed.

This material is for your education and information only. This content does not replace medical advice, diagnosis or treatment. New medical research may change this information. If you have questions about a medical condition, always talk with your health care provider.