

Inguinal Hernia Repair in Children

A Guide for Families

What is an inguinal hernia?

A hernia is the most common surgical problem of childhood. It results from a small sac that comes through the inguinal ring that is normally open during fetal life and closes permanently about the time the baby is born. The inguinal ring is the interior opening inguinal canal, which is the canal carrying the spermatic cord in boys and the round ligament in girls. For reasons we don't understand, it doesn't close in some infants. This sac then makes a pathway for abdominal organs to come through the inguinal ring into the groin. In boys, the organ is usually a loop of bowel and in girls, it may be bowel or an ovary. In boys and girls, the hernia first appears as a bulge in the groin, and may appear and disappear, or may be present all the time. It will usually "pop out" when the child cries or strains. If only fluid comes through the inguinal ring into the sac, the problem is called a hydrocele. You will be taught to push the hernia back in or "reduce the hernia" to make sure it isn't stuck.

Why does my child need surgery?

Inguinal hernias never go away without treatment. Furthermore, if the sac is left open, a loop of bowel or other organ may become trapped, also called incarcerated or strangulated, in the sac. Once stuck, the organ that comes through this very small opening can swell and compress the blood supply that is pulled along with it. Without adequate blood supply, the organ stuck in the hernia sac or testis can be damaged or even die. If your child has an incarcerated hernia, he or she may have a hard, red, painful lump; may vomit; may be unwilling to eat and may stop having bowel movement. This is an emergency. If this happens, your child should be taken to your pediatrician's office or, after hours, to the local emergency room. The pediatrician or emergency room doctors will contact us. If the hernia cannot be pushed back into the abdominal cavity, your child will need immediate surgery.

What is done during surgery and how long does the operation take?

The surgery takes about one hour. A doctor who specializes in anesthetizing children will put your child to sleep so that he or she will feel nothing during the surgery. Your child's surgeon will remove all or part of the sac that comes through the inguinal ring and close the opening of the hernia sac so that the hernia cannot return. In children less than one year of age, there may be an open sac on the other side that could become a hernia later, so your child's surgeon may use a tiny telescope to look on the opposite side and close the sac if there is one. The surgeon will discuss this with you before the operation. There will be no stitches to remove from the skin later because the stitches will all be under the skin and will dissolve on their own. Your child's skin will be covered with small bandages called Steri-strips®. There is very little blood loss in hernia surgery (about 1-2 teaspoons), so no blood is reserved for the operation. Your child will only receive blood during this surgery in the case of extreme emergency.

How long will my child stay in the hospital?

After the operation your child will return to the recovery area and you can be there while he or she is waking up. Some children are upset and confused as the anesthesia starts wearing off. This is temporary and not

unusual. Most children will go home as soon as they are awake and able to drink liquids after the operation. If your child was born prematurely, or has other health problems, the surgeon may keep him or her in the hospital overnight to monitor breathing.

How do I take care of my child following surgery?

Pain: At the end of the operation, the surgeon will put a long-acting, numbing medication into the incision. Most children only need Tylenol® or Motrin® by mouth every four to six hours for the first 24 hours after surgery. If your child is still uncomfortable, call our office and we will prescribe something stronger.

Dressings: Gauze and clear plastic dressings may be removed two days after surgery. It is normal for there to be a small amount of blood under the gauze. The skin surrounding the incision may be red and bruised, and the incision will be slightly swollen. Over the incision, there may be Steri-strips® that can be worn into the bath and can be removed one week after the operation.

Swelling: There will be some swelling at the incision. In boys, swelling of the scrotum is normal after hernia surgery, and may take several months to go away completely. In girls, there may be some swelling in the skin folds below the incision. For both boys and girls, you will be able to feel a firm ridge under the incision that lasts several months. This is called a "healing ridge" and is where the tissues are sewn back together.

Bathing: Your child may bathe or shower two days after surgery. Before then, he or she may take a sponge bath, but the Steri-strips® should be left on if they are present.

Activity: There are no specific restrictions. Children will limit their own activity until they feel better. Most are back to normal activity in a day or two. Some children may require several days to feel better.

Do I see the surgeon again after the operation?

Immediately after the operation, your child's surgeon will come out and talk with you. One or two weeks later, a nurse from our office will call you to see how your child is doing. A visit with your pediatrician about two weeks after the surgery is a good idea. You should call our office if you're worried about how things are going after the surgery. If you would like to come back for another visit, you are welcome to do so. Just call our office.

When do I call your office?

Call our office at (415) 476-2538 if:

- You have any concerns you have about your child's recovery
- Your child has temperature of 101.5 degrees or higher
- Your child's incision is red
- There is severe pain and tenderness at the incision
- There is any fluid coming out of the incision

GLOSSARY

Hernia: A sac that comes through an opening in the abdominal wall ("inguinal ring") that may fill with fluid ("hydrocele") or organs (bowel, ovary), that are normally present in the abdomen.

Hydrocele: A fluid-filled hernia sac.

Incarcerated or Strangulated: A condition in which an organ that has come through the inguinal ring becomes stuck in the hernia sac.

Inguinal ring: An opening in the abdominal wall.

Reducing the hernia or Reduction of the hernia: Pushing the organ in the hernia sac back into the abdominal cavity.

Scrotum: The sac that contains the testicles.

Steri-strips®: Small, white bandages that look like tape and are placed over the incision.

This information is for educational purposes only and is not intended to replace the advice of your physician or health care provider. We encourage you to discuss with your physician any questions and concerns you may have.