



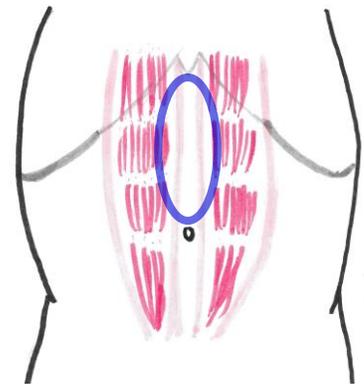
**APSA**  
American Pediatric  
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## Epigastric Hernia

*Patient and family information, brought to you by the Education Committee of APSA*

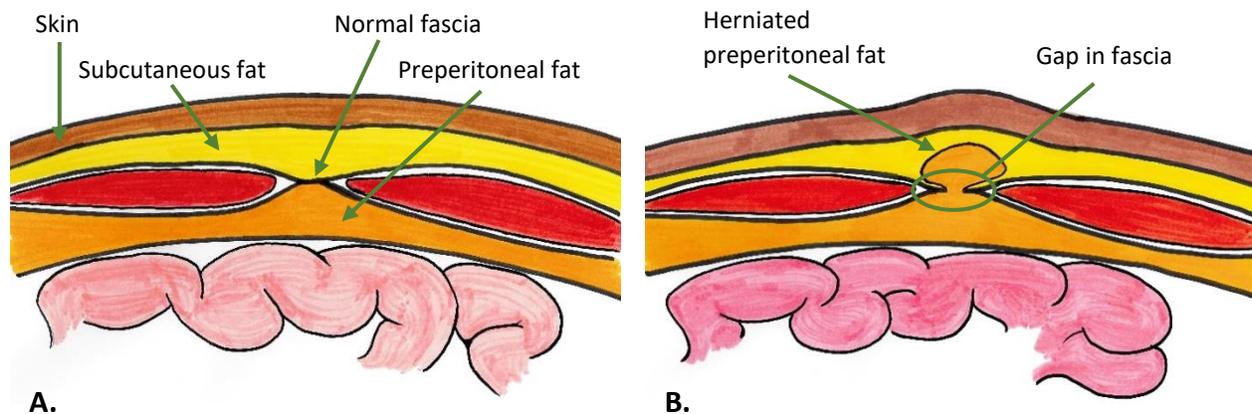
### Overview - “What is it?”

Epigastric hernias are lumps found in the center of the abdomen, above the belly button (**Figure 1**). In children, these hernias are typically present at birth, but they might not be noticed until the child is out of infancy. Epigastric hernias are due to a small gap in the tough tissue covering the rectus (“6-pack”) muscles, called fascia. When this gap is present, fatty tissue under the fascia, called pre-peritoneal fat, can push through the opening and cause the lump (**Figure 2**). In contrast to umbilical hernias, epigastric hernias will not go away on their own. Unlike other hernias, epigastric hernias do not contain intestines or other structures from within the abdomen, so they are not dangerous and cannot cause a bowel obstruction.



**Figure 1:** The blue oval highlights the site of epigastric hernias.

*(Image credit: Carl-Christian Jackson, MD)*



**Figure 2: A.** Normal anatomy; **B.** Epigastric Hernia

*(Image credit: Carl-Christian Jackson, MD)*

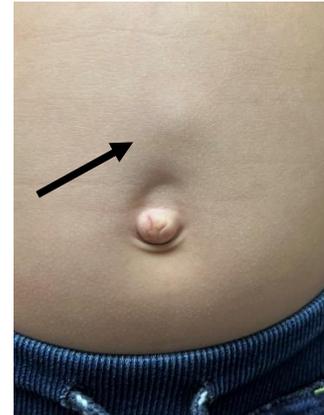
## Signs and Symptoms - “What symptoms will my child have?”

Most epigastric hernias are not painful and are only noticed when seeing or feeling a slight bump in the upper abdomen [Figure 3]. Pushing on the bump is usually not painful, but also does not make the bump go away.

Some children may report occasional pain at the hernia site during activity, which improves with rest.

Epigastric hernias can enlarge over time, when more preperitoneal fat pushes through the fascial opening.

Rarely, the blood flow to the herniated fat gets pinched off when too much tissue pushes through the opening. In this situation, the area may become painful, tender to touch and the skin may look red.



**Figure 3:** Epigastric hernia above the belly button.

*(Image credit: Carl-Christian Jackson, MD)*

## Diagnosis - “What tests are done to find out what my child has?”

**Physical Exam:** Most epigastric hernias are diagnosed by history and physical exam alone. If the hernia is hard to see or feel, you can help your surgeon before your visit by measuring the distance from the belly button to the lump or by putting a mark on the spot using a Sharpie®.

**Ultrasound:** Occasionally, an ultrasound is used to help confirm the diagnosis.

## Treatment - “What will be done to make my child better?”

**Asymptomatic epigastric hernia:** For hernias without pain, tenderness or other symptoms, surgery is an elective procedure. There is no routine age for this surgery, but many surgeons will recommend repair between 3 and 6 years old.

**Symptomatic epigastric hernia:** If your child suddenly develops pain and redness at the site of their epigastric hernia, initial treatment is with oral medication (Tylenol®, ibuprofen, etc) and/or cold compresses. If these treatments work well to manage the pain, then surgery can be done electively. For painful epigastric hernias that don't get better with these measures, an urgent surgery is recommended.

**Surgery:** Surgery to fix an epigastric hernia is done under general anesthesia, which means your child will be asleep and will have their breathing supported by the pediatric anesthesiologist. During the surgery, local anesthetic is also used to help minimize post-operative pain. The surgery involves making a small incision over the bump, separating the preperitoneal fat from the subcutaneous fat, pushing the herniated tissue back into place or removing it, then closing the fascia with stitches. The skin edges are brought back together with stitches, Steri-Strips and/or surgical glue.

- **Preoperative preparation:** Your surgeon will provide preoperative instructions regarding eating/drinking limitations before the surgery.
- **Postoperative care:** After surgery, your child will go to the recovery room. Once they are awake, tolerating liquids and some solid food, and showing good pain control, you will be discharged home.
- **Risks:** Risks of surgery include: bleeding, infection, hernia recurrence and excessive scarring. All of these risks are quite rare.

## Home Care - “What do I need to do once my child goes home?”

**Diet:** Regular diet.

**Activity:** In most cases, your child will be feeling better and back to regular activities within 1-3 days. There is no need to limit their play, as this type of hernia typically does not come back as a result of strenuous activity.

**Wound care:** The incision will need to remain dry for 24-72 hours, then it can be washed with soap and water. The incision should not be submerged in water for 1-2 weeks.

**Medicines/pain management:** Children are usually sore for 2-3 days after surgery. This pain can be managed with Tylenol® and ibuprofen given every 6 hours for 1-2 days, then switching to giving the medicine only as needed. A Boo-Boo Buddy (either cold or warm) can be put on the belly if your child will tolerate it.

**What to call the doctor for:** Persistent or spreading redness around the incision, fevers or chills.

**Follow-up care:** Your surgeon will see your child 2-3 weeks after surgery, sooner if you have concerns.

## Long Term Outcomes - “Are there future conditions to worry about?”

Right after surgery, a lump will still be felt at the repair site, which is caused by the sutures used to close the fascia. If absorbable stitches were used, this lump will go away over the next several months. If a permanent stitch was used, a small firm lump may always be felt.

Recurrence of the hernia is very rare.

Occasionally a new epigastric hernia arises at a different site. The new hernia would be repaired in the same way.

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