

Hernia

Have you noticed a bulge or pain in your abdominal wall or groin? If so you may have a hernia. You may be in the process of confirming this diagnosis with your Primary Care Physician or already have been diagnosed with this condition. Hernias are a common problem, and more than one million hernia repairs are performed each year across the United States. So, let's discuss in more detail so that you can understand your condition and the available options.

What is a Hernia?

A hernia is a weakness or disruption of the abdominal wall muscles that allows contents from a body cavity to pass through, or "herniate" into another space. Some of these are natural hernias that occur at places like the belly button (umbilicus) or the groin (inguinal). Others may be the result of prior surgeries, which can lead to hernias at the old incision (incisional or a ventral hernia).

Types of Hernias

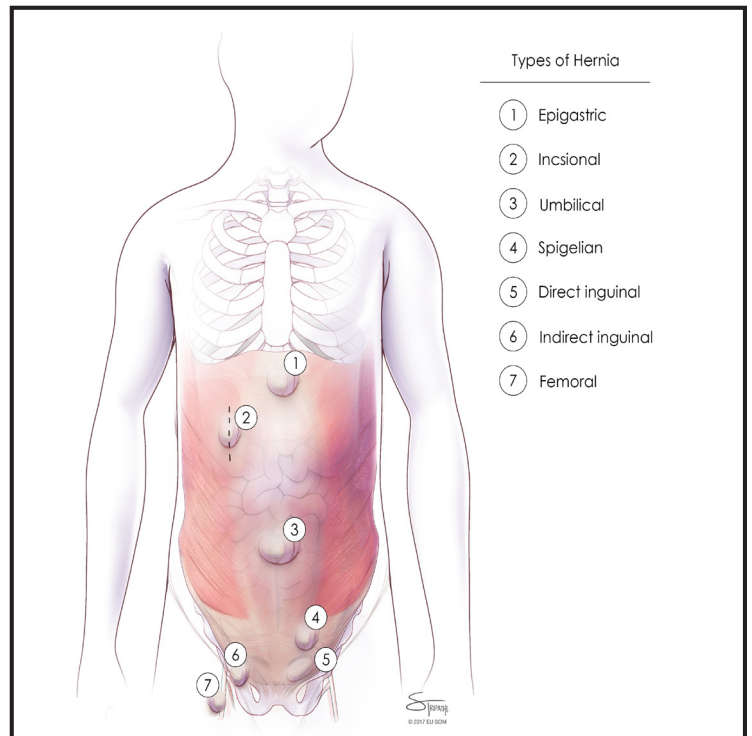
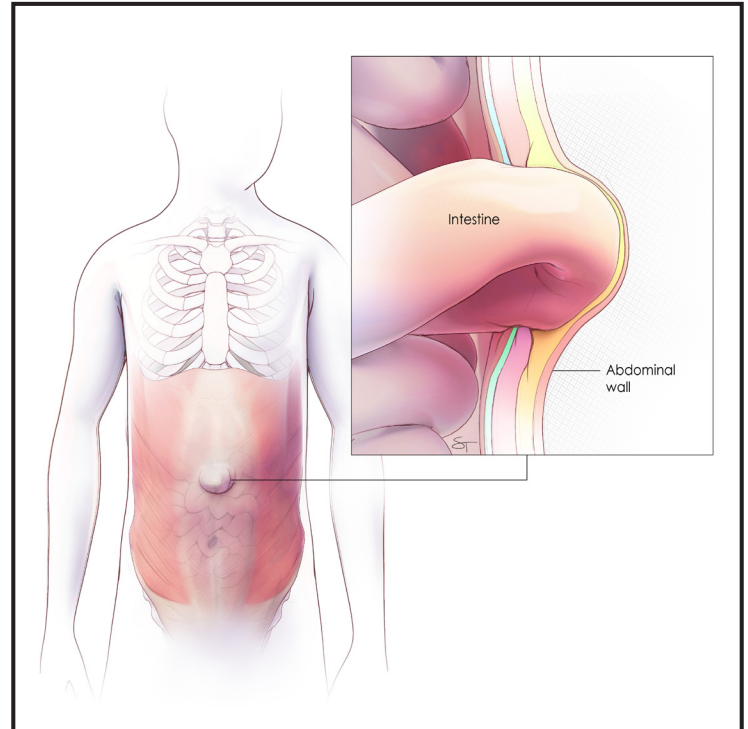
The type of a hernia depends on its location. The most common hernias occur in the groin, also known as an inguinal hernia. These occur at the entrance of a canal between the abdomen and groin.

- *Incisional Hernia* - Occurs at the site of a previous surgical incision.
- *Umbilical Hernia* - Occurs at the navel.
- *Femoral Hernia* - Occurs just below the groin where the blood vessels course into the leg.
- *Epigastric Hernia* - Occurs in the middle of the abdomen above the navel.
- *Hiatal Hernia* - Occurs when part of the stomach bulges into the chest through the diaphragm.

What Causes a Hernia?

A hernia is a weakness or defect in the wall of the abdomen. This vulnerability may be present at birth or can be caused by the wear and tear over time. Some of the causes are listed below, per the hernia type:

Umbilical Hernias – Adults have a natural weakness at the umbilicus where the umbilical cord connects as an infant. This can be an area where hernias may form and some risk factors including multiple pregnancies, straining, weight gain/obesity, prolonged or a heavy cough.



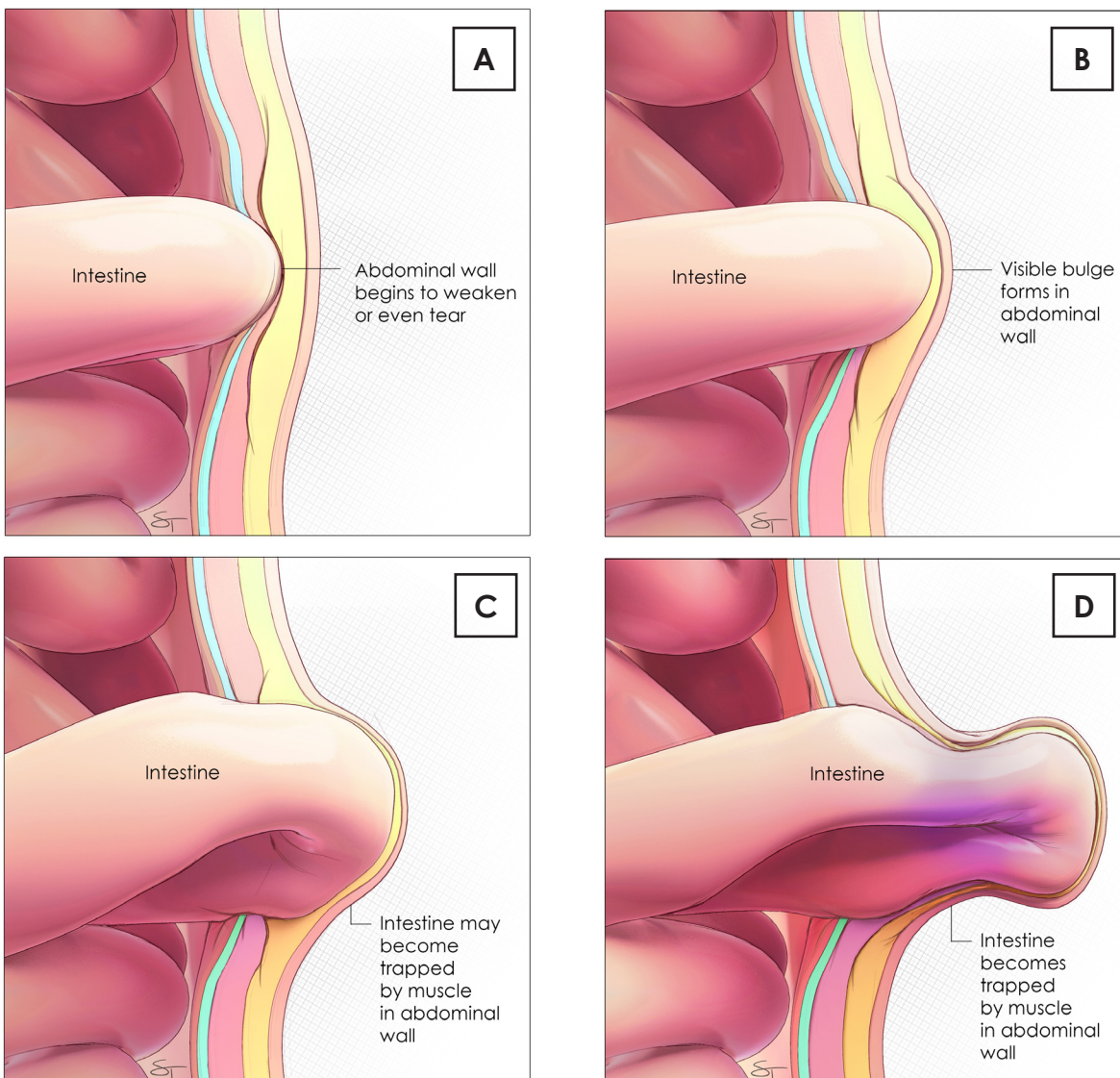
Epigastric Hernias – These are hernias that occur above the umbilicus in the middle of the abdomen. The exact cause is unknown and may be from many factors

Inguinal/Femoral Hernias – Are caused by weakness in the groin or from disruption of the muscles in the groin caused by straining that can occur from physical exertion, constipation, obesity, or pregnancy. It is possible to develop these hernias even without the risk factors for them.

Incisional Hernias – Hernias may occur at prior surgical incision sites as these areas are potentially weak areas in the abdominal wall. If there was an infection of the surgical wound at the first surgery, there is a much higher chance that the closure will not heal correctly leading to a hernia. Other critical risk factors for developing a poorly treated incision are obesity and smoking. In many cases, these issues need to be addressed to repair a hernia.

Hiatal Hernias – These are hernias caused by weakening of the diaphragm muscle with age causing part of the stomach and other abdominal contents to herniate into the chest. The exact cause of this type of a hernia is unknown. These can lead to many symptoms such as reflux, trouble swallowing food, or vomiting. They happen to women more than men.

Stages of Hernia Development



There are several stages of hernia formation. First, the abdominal lining will protrude through a weak area in the abdominal wall muscle and form a hernia sac. The sac may contain fat, intestines, or other tissue. As a hernia enlarges and the abdominal contents push more into the sac, it will start to form a visible bump.

The bump may disappear when lying flat or if pressure is applied, and this is called a reducible hernia. As long as a hernia is reducible, there is usually no immediate danger. In some cases, the abdominal contents in the hernia sac may become trapped by muscle, and this is called an incarcerated hernia. At this point, if the bulge does not disappear when lying flat or by placing pressure, please seek immediate medical attention. In the last stage, the intestine may become tightly trapped choking off the blood supply to the intestine, and this is known as strangulation. Strangulation can cause severe pain and lead to bowel obstruction symptoms (nausea, vomiting, inability to have bowel movements or pass gas, abdominal swelling). In these instances, emergency surgery may be required.

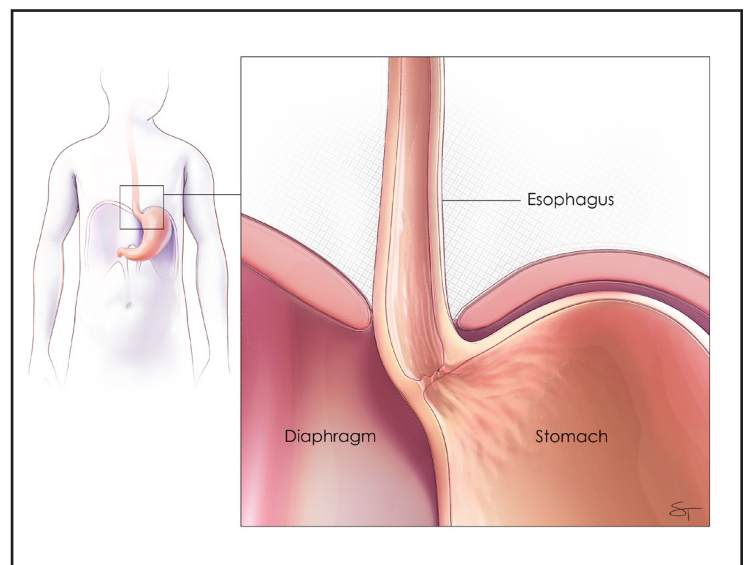
Hernia Symptoms

- Bulge around the abdominal, groin, or scrotum that may increase in size with time
- Increase in bulge size when coughing, straining during bowel movements, urinating, lifting, laughing, or crying, or while doing activities
- Bulge size may increase in size while sitting up or standing and may disappear with laying down
- Pain with strenuous activity or with lifting
- Dull aching pain at a hernia site
- Bowel blockage symptoms

Hiatal Hernia

This common problem occurs when part of the stomach slides up through the diaphragm into the chest cavity. Hiatal hernias aren't like hernias in the groin. Most people with hiatal hernias do not present any symptoms, however, if the following conditions are present, it may be best to speak with a physician:

- Heartburn
- Frequent burping
- Acidic taste in the mouth
- Difficulty swallowing
- Nighttime choking, coughing or wheezing



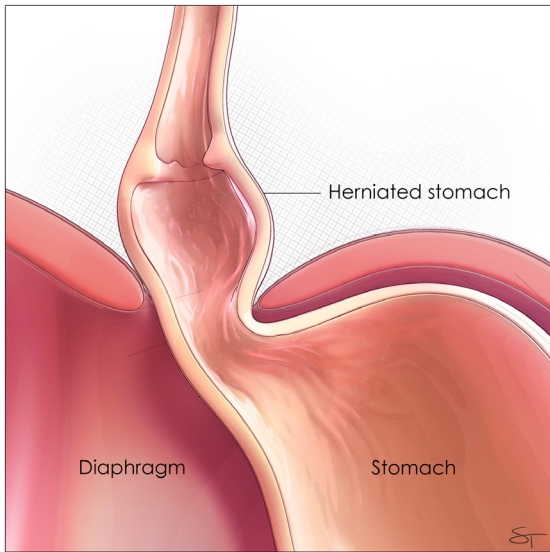
Hernias Diagnosis

Abdominal wall hernias can be diagnosed with a simple physical exam by a doctor. At times, using imaging equipment like an ultrasound, CT scan, or MRI may be needed to confirm the diagnosis. Hiatal hernias cannot be diagnosed by physical exam and require imaging like an upper GI study which is done in radiology or by and an upper endoscopy.

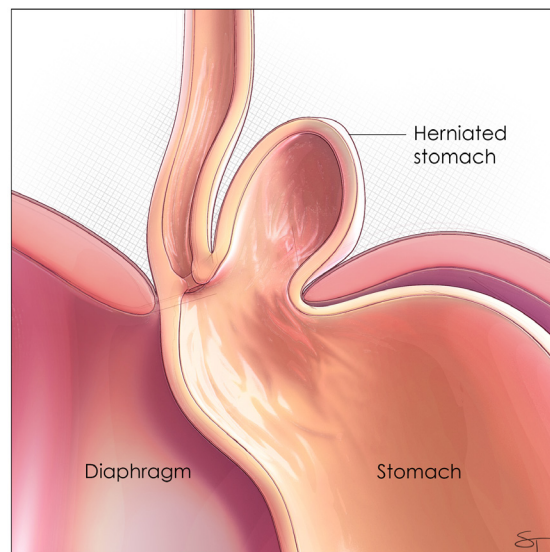
Hernia Repair Surgery

Hernias in adults do not resolve on their own and may require surgery to correct. There are multiple approaches to fixing hernias including open, laparoscopic and robotic surgery. A surgeon will determine and discuss the optimal strategy after evaluating impacting factors, such as hernia size, medical history, and surgical history.

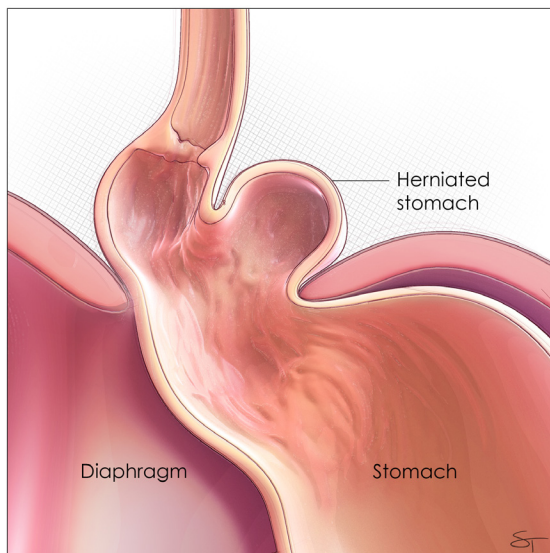
For select hernia surgeries, a surgeon may need to use mesh to repair the defect in the abdominal wall. The mesh may be placed on top of the muscle layer, below the muscle layer or in the muscle layer. The mesh makes the hernia repair stronger to reduce the chance of it coming back.



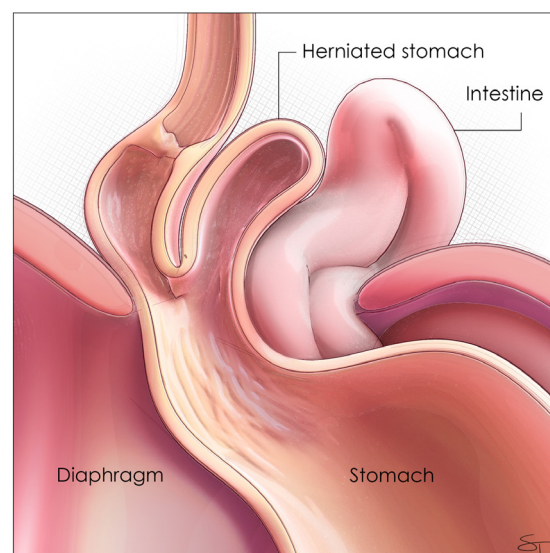
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Open Surgery

This involves making an incision in the area of a hernia to push the hernia contents back into the abdominal cavity. The defect may be closed with a combination of stitches and mesh. This is often needed for larger or more complex hernias, or for patients with many prior operations.

Laparoscopic Surgery

“Keyhole” surgery is done through a series of small incisions. This method allows the physician to look around the abdomen to assess a hernia. While an excellent way to repair hernias for many patients, there are limitations to this type of surgery.

Robotic Surgery

This is also “keyhole” surgery, but in this instance, a robot is used by the surgeon to fix a hernia. The robot's arms allow for greater flexibility than what is available via traditional laparoscopic techniques. This greater flexibility allows the surgeon to accomplish complicated tasks like internal sutures. Additionally, the robotic platform gives the surgeon a 3D high definition view of the inside of the abdomen. This enhanced vision can help with precision.

In recent years, there has been a great increase in the use of the surgical robot for hernia repairs. This is because there are some techniques, often called “abdominal wall reconstruction,” which require a lot of sewing and dissection. Some of these techniques are made much easier by using the surgical robot. In fact, many procedures previously performed with a large incision are now less invasive due to the use of surgical robots. This has led to speedier recoveries for many patients, including shorter hospital stays, reduced pain, less need for pain medications, and less scarring.

As we shared, there are multiple approaches to repairing hernias: open surgery, laparoscopic surgery and robotic surgery. Over 1,300 hernia procedures were performed at Emory Healthcare in 2016. That includes 150 robotic hernia repairs.

Make an Appointment

To make an appointment, please call 404-778-7777.

