

Hernias – They Should not be Ignored

Did you know that over five million Americans suffer from some type of hernia? For many of these people, this condition causes substantial pain and restricts activity – and it can even pose a threat to their life. Unfortunately, only about 750,000 of these Americans will seek medical attention for hernia repair. They may not want to be inconvenienced by surgery or are skeptical about treatment. Or, they just may not understand the possibility of danger. Fortunately, with proper treatment from a specialized hernia surgeon, most hernias can be repaired quickly and safely through minimally invasive surgical procedures – and patients can be back on their feet in no time.

What is a Hernia?

A hernia develops when an organ or fatty tissue protrudes through a weak area of the body. The most common type of hernia occurs when part of the intestine bulges through the abdominal wall, causing a visible lump in the lower abdomen or groin. However, there are many different types of hernias, occurring in various locations of the body. Generally, hernias are classified as reducible (can be spontaneously or manually pushed back to proper location) or irreducible (cannot be pushed into proper location). Hernia development varies greatly – some are present at birth, some develop over time, and others appear rapidly. Following is an overview of the most common types of hernias:

Inguinal hernia. This is the most common type of hernia, accounting for 75% of all hernias. Inguinal hernias may be present at birth, but they can also develop later in life. In addition, they are five times more common in men than in women. In this type of hernia, a bulge appears in the inguinal crease, the groin area where the thigh joins the torso.

At a Glance

- Over five million Americans have some type of hernia
- Only 750,000 of these seek treatment for hernia repair
- Many people live unnecessarily with the discomfort of a hernia
- All hernias need a thorough medical evaluation
- All hernias have the potential of developing into a life-threatening condition
- Hernia repair at Baylor Clinic is typically an out-patient, minimally invasive procedure
- Treatment from a specialized, experienced hernia surgeon is imperative for successful hernia repair
- It is important to know the signs of a strangulated hernia and seek prompt medical attention when experienced
- Most hernias can be prevented by preventing strain on the abdomen

There are two types of inguinal hernias: indirect and direct. Although they look and feel the same, proper diagnosis is critical for effective treatment. Regardless of the type, inguinal hernias require prompt medical treatment.

Indirect. These occur when the opening to the inguinal canal (the pathway the testicles make during fetal development) does not close properly before birth, and a portion of the intestine protrudes. Up to five percent of full-term and ten percent of premature babies have this condition.

It is typically diagnosed within the first year of life, but may not be found until later in life.

Direct. These do not occur at the opening of the inguinal canal, but rather in the canal itself. These are typically the result of weakened abdominal muscles along the canal and most often occur in middle-aged and elderly men. They are very rare in children.

Femoral hernia. Femoral hernias occur in the femoral canal, or the path that contains the femoral artery and vein, between the abdomen and the thigh. Typically, this type of hernia causes a bulge in the upper thigh, just below the groin. These hernias are at a higher risk of being irreducible, as the area in which they present is very narrow. Femoral hernias are more common in women than men, accounting for one third of their groin hernias. They also require prompt medical evaluation.

Epigastric hernia. These occur in the middle of the upper abdomen, between the naval and rib cage, in a weakened abdominal muscle. Typically this type of hernia contains only fatty tissue, not intestine, and is small in size. About three to five percent of the population has an epigastric hernia, but they are most common in men between the ages of 20 and 50. Most often, these hernias are painless, small in nature and go unnoticed.

Hiatal hernia. This type of hernia occurs when the area between the esophagus and diaphragm (the hiatus) becomes weakened, allowing a portion of the upper stomach to bulge into the chest cavity. Small hiatal hernias are typically asymptomatic, and are usually detected only when looking for another condition. But larger hiatal hernias can restrict the esophagus, causing acid-reflux like symptoms. Many times, small hiatal hernias can be treated with medication, but large hernias will require surgical repair.

Umbilical hernia. Umbilical hernias account for ten to 30 percent of all hernias. Most often, these are present at birth when the umbilical ring doesn't close completely, and leaves an opening in the abdominal wall. Sometimes, if the hernia is small, it will close spontaneously over time. If not, they require surgical repair between the ages of two and four. Umbilical hernias also occur in adults, when the area around the

naval becomes weakened due to age. This condition is more likely in women than men. Adult umbilical hernias usually require surgical repair as they do not typically close over time.

Incisional hernia. Incisional hernias result after abdominal surgery in an area of the abdominal wall that has been weakened by the incision. These are fairly common and occur after about ten percent of all abdominal surgeries. Hernia size varies from very small to quite large, and these hernias frequently recur after surgical repair – large incisional hernias have a recurrence rate up to 50 percent.

Spigelian hernia. This is an extremely rare hernia that occurs where the abdominal muscles fuse to the rectus. Often, these hernias lie beneath the muscle layer and are not visible; therefore, diagnosis can be difficult. Ultrasound and CT scan are typically required to diagnose a hernia of this type.

Obturator hernia. Obturator hernias are very rare and occur most frequently in elderly women. They are difficult to diagnose, as they are lodged in the obturator foramen (the area of the pelvic bone where nerves and muscles pass through) and are not visible. Because of their concealed location, they are also the most dangerous abdominal hernia with a mortality rate up to 40 percent.

What Causes Hernias?

The exact cause of hernias is unknown. Some abdominal hernias are congenital and present at birth, while others develop later in life. Although the cause of hernias is unknown, it is clear that any weakness in or intense pressure on the abdomen wall can contribute to hernia development. These include:

- Obesity
- Extensive exercise
- Heavy lifting
- Vigorous coughing
- Constipation and straining during bowel movement
- Pregnancy
- Peritoneal dialysis
- Chronically enlarged pelvic organs
- Fluid in the abdominal cavity
- Pelvic tumors
- Previous surgery
- Wound (surgical) infection

What are the Symptoms?

Symptoms of hernias vary, depending on type and location. Most hernias will produce a bulge in the affected area and some type of discomfort; however, this is not always the case. Some hernias do not present any symptoms at all, do not produce a bulge and are only discovered during a routine physical examination. Regardless of whether a hernia produces symptoms or not, it should receive a thorough medical evaluation as all hernias have the potential of becoming dangerous.

The pain associated with abdominal and groin hernias is typically described as dull, pulling, tender, achy, or radiating, and usually increases with physical activity or strain to the area (lifting, pushing, coughing, etc.). Large hiatal hernias can cause stomach acids to enter the esophagus, resulting in acid reflux-like symptoms including heartburn, belching, chest pain and nausea. When symptoms arise, depending on the type of hernia, relief may be found by lying down or discontinuing physical activity. Sometimes hernias that do not have an obvious bulge will become more apparent with physical exertion.

All hernias pose a risk of becoming strangulated, which means they can cut off blood supply to the entrapped intestine, potentially a life-threatening condition called gangrenous bowel. Symptoms of a strangulated hernia may include severe abdominal or chest pain, constipation, nausea, difficulty swallowing and/or vomiting. Another common sign of a strangulated hernia is the inability to push the bulge back into your body (irreducible); however, being irreducible does not always indicate strangulation. When a strangulated hernia is suspected, immediate medical attention should be sought from a skilled, experienced hernia surgeon. If you know you have a hernia, you should be aware of strangulation signs and seek medical attention promptly should they occur.

How are Hernias Diagnosed?

Very small hernias without symptoms typically go unnoticed, and are usually discovered during routine physical exams. Most people who have obvious, bulging hernias discover them on their own, but medical attention should be sought for proper diagnosis and treatment. During a physical examination, you may be asked to cough or strain, as it will usually reveal the hernia. Some hernias are more difficult to diagnose because they are not obvious and

Men, Fertility and Hernias

Hernias can pose special concerns for men of reproductive age. At Baylor Clinic, we combine internationally-acclaimed fertility specialists with the most advanced minimally invasive surgical procedures. This means we deliver comprehensive and effective hernia treatment, while ensuring the integrity of reproductive abilities. Careful evaluation, based on each individual's needs and situation, is given to technique and materials before and during hernia treatment for these men. With the ongoing research at our Laboratory for Male Reproductive Research and Testing (LMRRT) we deliver the most comprehensive and successful outcome possible for these men.

their symptoms are generalized, like spigelian and obturator hernias. For proper diagnoses, these require diagnostic imaging like CT scan or ultrasound.

How are Hernias Treated?

Most hernias will not go away spontaneously, but rather grow larger and more dangerous over time. These hernias require surgical treatment. Although many doctors perform hernia surgery, for best results it is important to seek treatment from an experienced surgeon who specializes in hernia repair. Often, improper repair of a hernia only leads to additional, unnecessary procedures to correct the original repair. By seeking skilled medical attention initially, you can ensure a more successful and expedient outcome.

Many advances have been made in hernia surgery techniques in recent years. Treatment varies depending on the type and location of the hernia. However, most hernias can be successfully repaired using minimally invasive techniques in an out-patient setting. These techniques are performed using smaller incisions and laparoscopic methods – this means less discomfort, less scarring and a quicker recovery for you. During surgery, the hernia will be pushed back into the appropriate position, and the open area will be stitched closed. Often, mesh patches are used to reinforce the opening and prevent hernia recurrence. It is important to note that different mesh materials are used in this procedure, depending on the physician's choice, and

some materials are conducive to post surgery infection; again, using an experienced hernia surgeon can ensure a more successful outcome. For extremely large hernias, open surgery may be required.

Most hernia surgeries are not urgent and can be scheduled at your convenience. However, in the event of a strangulated hernia, immediate surgery is needed. Seeking emergency treatment at a reputable surgical hospital is advised for this condition.

Often, hiatal hernias are treated with medication as a first line approach. Common medications include antacids, H-2 blockers and proton pump inhibitors. All of these should help ease acid-reflux like symptoms. However, surgery may be necessary as the hernia becomes larger.

The Baylor Clinic Advantage

At Baylor Clinic we are highly skilled and experienced in hernia repair – as a matter of fact, we wrote the book on it. Many of our surgical techniques were developed and refined right under our roof at the Baylor College of Medicine. With our world-renowned minimally invasive surgical team, state of the art equipment and ongoing research efforts, we can ensure the best outcome for your hernia repair with the least inconvenience for you. We perform thousands of hernia surgeries every year, including many surgeries to repair previous unsuccessful procedures. We understand that medicine is personal, that each patient (and each hernia) is unique, and we go the extra mile to make sure you receive the treatment that's right for you – personalized to meet your needs.

Unlike other clinics, Baylor Clinic takes a comprehensive approach to hernia treatment. This means that we have specialists in every field, all under one roof – and you have open access to them. We don't look at a hernia as an isolated condition; we are prepared to detect and treat any other underlying conditions that may be related or arise in the treatment process. From urinary, prostate, pulmonary and fertility – we take a comprehensive approach to ensure optimal health and outcome for you. We even have plastic surgeons standing by during hernia surgery in the event that specialized care is required for abdominal wall integrity or minimal scarring.

Can I Prevent Hernias?

Some hernias are congenital, and can't be prevented. However, there are many things you can do to help prevent the development of a hernia. In general, limiting any type of undue pressure or strain on the abdomen can reduce the risk of hernia development. Here are a few precautions you can take:

Maintain a healthy weight. Make sure your weight is within targeted body mass index (BMI). If it is not, talk to your doctor about a diet plan to lose weight.

Eat a high-fiber diet. High fiber diets can help move the bowels without causing strain on the abdomen.

Use proper technique when lifting. When lifting heavy objects, make sure you lift with your legs, not from your back or waist.

Stop smoking. Smoking increases your risk of many diseases, but it also can lead to chronic coughing – increasing strain on the abdomen.

Use stool softeners, if necessary. If you strain persistently when moving your bowels, talk to your doctor about a stool softener to prevent unnecessary strain on the abdomen.

What is Baylor Clinic Doing about Hernias?

Baylor Clinic provides a comprehensive approach to hernia treatment. And, because we work in tandem with Baylor College of Medicine, we bring the benefits of our latest research efforts directly to your bedside. Our recent hernia research includes characterization of genes that cause common hernia birth defects, perfection of non-invasive repair procedures and extensive study of materials to patch hernia openings. A large part of our research efforts involve following patients post surgery to study the effectiveness of operative procedures and impact on daily lifestyle. Standard protocols after surgery ensure that each patient is carefully monitored for optimal treatment success. After all, we want you to have the best health possible.

We Will Take Care of You.

You may never have a hernia, or you may suffer with chronic pain related to one. Regardless of your

situation, it is important to get the high-quality, personalized medical care you deserve. At Baylor Clinic it's all about you. We provide the highly-skilled resources you need to manage your health in one convenient location. Our doctors will listen to you and work collaboratively to treat you. With our integrated approach, we combine the best of medicine, science, education and service to deliver comprehensive, compassionate care. At Baylor Clinic, you will have access to all the experts you need and the benefits of the latest technology, discoveries and advances in medicine. What we are learning in our research today is implemented at the bedside tomorrow. It all comes back to you. Let our doctors take care of you.

Call Us Today— We're Waiting for You.

The physicians at Baylor Clinic are some of the best minds in medicine. We offer personalized care for the whole person and the whole family, meeting the needs of all ages and addressing all types of healthcare concerns. Our patients benefit from:

- Board-certified physicians and certified physician's assistants
- Onsite specialists, when needed, expediting your treatment
- Innovative treatments based on the latest research findings
- Modern systems that make the healthcare process easier
- A collaborative environment that brings together multiple specialists all working together to improve your care and treatment.

Make an appointment with a Baylor Clinic expert physician today.

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