#### **ABDOMINAL / INGUINAL HERNIA**

#### What Is a Hernia?

A hernia occurs when an organ or fatty tissue comes out through a weak spot in a surrounding muscle or connective tissue overlying abdominal wall.

The most common types of hernia are inguinal (inner groin), incisional (resulting from an incision/Post Surgery), femoral (outer groin), umbilical (belly button), and hiatal (upper stomach).

In an **inguinal hernia**, the intestine or the bladder comes out through the abdominal wall or into the inguinal canal in the groin. About 90% of all groin hernias are inguinal, and most occur in men because of a natural weakness in this area.

In an **incisional hernia**, the intestine comes out through the weak abdominal wall at the site of previous abdominal surgery.

In an **umbilical hernia**, part of the small intestine comes out through the abdominal wall near the navel (Belly button)

A **femoral hernia** occurs when the intestine enters the canal carrying the femoral artery into the upper thigh. Femoral hernias are most common in women, especially those who are pregnant or obese

Hiatal Hernia: This type of hernia occurs at the junction of Oesophagus (food pipe) and Stomach, where a part of stomach comes out in the thorax from a gap in diaphragm leading to recurrent reflex of acid in the food pipe (GERD) Gastro Esophageal Reflux Disease.

#### What are Causes Hernias?

All hernias are caused by a combination of pressure and an opening or weakness of abdominal muscle. The pressure pushes an organ or tissue through the opening or weak spot.

Anything that causes an increase in pressure in the abdomen can cause a hernia, including:

- Lifting heavy objects without stabilizing the abdominal muscles
- Diarrhoea or constipation
- Persistent coughing or sneezing

In addition, obesity, poor nutrition, and smoking, can all weaken muscles and make hernias more likely.

### What are the symptoms of a hernia?

The most common symptom of a hernia is a bulge or lump in the affected area. In the case of an inguinal hernia, a swelling may be seen on either side of pubic bone where the groin and thigh meet.

A hernia can be felt through touch when one stand up, bend down, or while coughing.

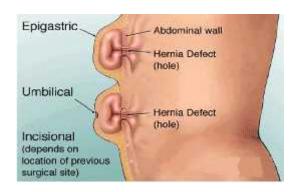
## Other common symptoms of an inguinal hernia include:

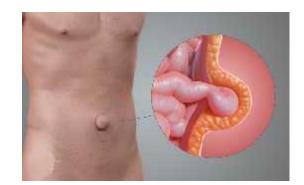
- Pain or discomfort in the affected area (usually over the abdomen), especially when bending over, coughing, or lifting
- Weakness, pressure, or a feeling of heaviness in the abdomen
- · A burning, gurgling, or aching sensation at the site of the bulge

# Other symptoms of a hiatal hernia include:

- Acid reflux, which is when stomach acid moves backward into the oesophagus causing a burn in food pipe.
- · Chest pain / discomfort
- Difficulty in swallowing
- Recurrent sore throat, tonsillitis

In some cases, hernia is found during a routine physical or a medical exam for an unrelated problem.





### How hernia is diagnosed?

Inguinal or incisional hernias are usually diagnosed through a physical examination. A physician may feel for a bulge in ones abdomen or groin that gets larger when one stand, cough, or strain.

The diagnosis further adjuvants with a ultrasound / CT abdomen depending upon site.

In case of hiatal hernia, Endoscopist may diagnose it with a Contrast X-ray, CT scan or endoscopy.

# Treatment options for a hernia

Whether a person needs treatment depends on the size of hernia and the severity of symptoms.

Treatment options for a hernia include lifestyle changes, medication, or surgery.

# Lifestyle changes

Dietary changes can often treat the symptoms of a hiatal hernia, but won't make the hernia to get cured. Avoid large or heavy meals, don't lie down or bend over after a meal, and keep body weight in a healthy range.

Certain exercises may help strengthen the muscles around the hernia site, which may reduce some symptoms. However, exercises done improperly can increase the size of the hernia to bulge more.

If these changes don't eliminate the discomfort, one may need surgery to correct the hernia.

#### Medication

Hiatal hernia can be symptomatically managed with acid blocker medication which include antacids, H-2 receptor blockers, and proton pump inhibitors.

There is no medicinal treatment to cure abdominal hernia

# Surgery

If a hernia is growing larger or causing pain, it's always to better to go ahead with surgical repair.

In modern practice, a hernia is repaired by patching with a graft (Mesh)

Hernias can be repaired with either open or laparoscopic surgery.

Laparoscopic surgery uses a tiny camera and miniaturized surgical equipment to repair the hernia using only a few small incisions.

Laparoscopic surgery is less damaging to the surrounding tissue.

Open surgery requires a longer recovery process.

Laparoscopic surgery has a much shorter recovery time.

In addition, not all hernias are suitable for laparoscopic repair.

Abdominal hernia larger than 8 cms requires open surgical approach.

### Potential complications of a hernia

If left untreated, a hernia may grow and become more painful.

A portion of intestine could become trapped in the abdominal wall. This can obstruct the bowel and cause severe pain, nausea, or constipation.

An untreated hernia can also put too much pressure on nearby tissues. This can cause swelling and pain in the surrounding area.

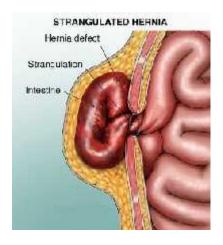
If the trapped /obstructed section of intestines doesn't get enough blood flow, strangulation (death of part because of loss of blood supply) occurs. This can cause the intestinal tissue to become infected or die. A strangulated hernia is life-threatening and requires immediate medical care.

### **PREVENTION OF HERNIA**

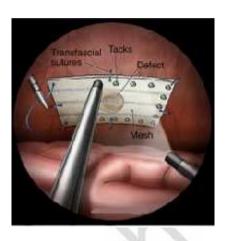
We can't always prevent the muscle weakness that allows a hernia to occur. However one can reduces the amount of strain place on his/her body. This may help in avoiding a hernia or keep an existing hernia from getting worse.

Few prevention tips include:

- Quit smoking
- Maintaining a healthy body weight
- To avoid strain during bowel movements or urination
- lifting objects with knees and not your back
- Avoiding lifting weights that are too heavy.



Strangulated Hernia



Laparoscopic Mesh Repair



Open Hernia Repair