

# **Different Types of Hernias**

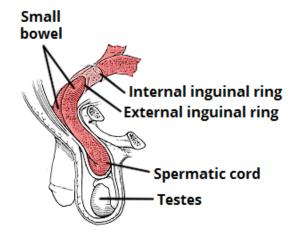
A hernia occurs when an organ or fatty tissue squeezes through a weak spot or tear in the surrounding muscle or connective tissue (fascia) forming a balloon like sac. This sac can be seen as a bulge under the skin when standing or exerting pressure (lifting a heavy object or coughing) and usually disappears when lying flat. A hernia is caused by a combination of pressure and an opening or weakness in the muscle. A hernia can develop in various places in the abdomen.

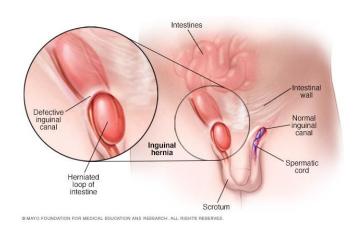
A hernia can be present at birth but most develop over time. Hernia's can be exacerbated by a chronic cough, constipation or heavy lifting, and usually get worse with time.

The majority of hernia's occur in the groin area (inguinal and femoral hernia's).

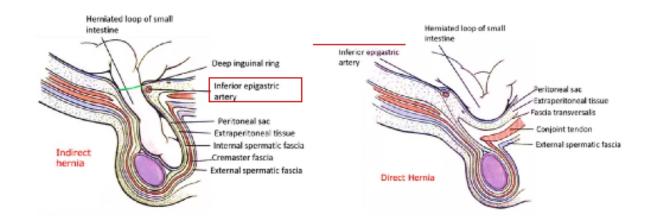
### Inguinal Hernia

An inguinal hernia appears as a bulge in the groin region and is more common in men than women. In males, an inguinal hernia can descend into the scrotum. You can get two types of inguinal hernia's, direct and indirect, and both can enlarge enough to contain abdominal fat or bowel. Inguinal hernia's generally cause discomfort and tenderness and may cause sharp pain with increased activity and relief with rest. It is common that the pain will tend to be worse in the evening after a full day of activity compared to the morning.



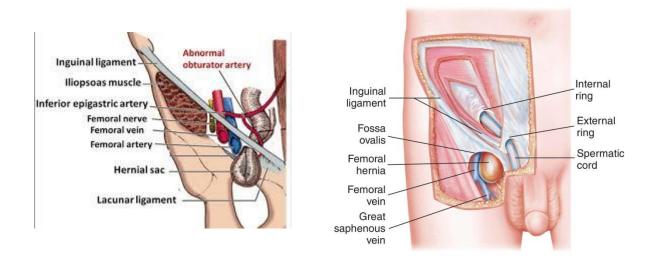






### Femoral Hernia

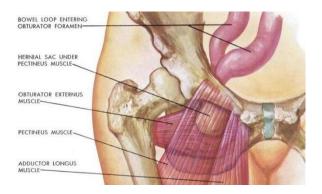
A femoral hernia appears as a bulge in the upper thigh, where the leg joins the body. These are more common in women. This hernia can contain a loop of intestines or another part of the abdominal contents, which have been pushed through the femoral canal (an anatomical compartment in the thigh). A femoral hernia can cause abdominal pain, nausea and vomiting, as well as discomfort when standing or lifting heavy objects.





### **Obturator Hernia**

An obturator hernia is more rare and predominantly seen in women. Is known as the 'little old ladies' hernia. This hernia occurs when a loop of bowel protrudes through the obturator foramen. Women have a larger triangular obturator foramen.

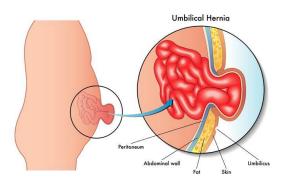


### **Umbilical Hernia**

An umbilical hernia is a small bulge that develops around the umbilicus (belly button). They can occur in children and adults. In children, they usually resolve by the time the child is 2-3 years of age. In adults, an umbilical hernia is not dangerous in itself, but there is a risk that it will become obstructed by other organs which can lead to serious complications. An umbilical hernia may not be painful but if left without surgical intervention it can become larger and uncomfortable.

### **UMBILICAL HERNIA**







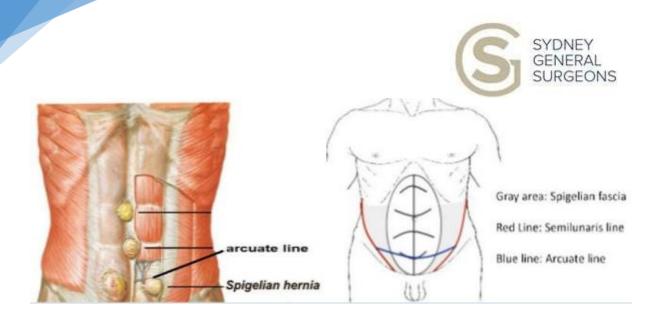
### Incisional Hernia

Incisional hernia's can occur when previous surgical incisions made in the abdomen have not healed properly and where there is a weakening of the abdominal wall muscle due to the surgical incision. These hernia's are usually small and can cause pain or discomfort. Risk is more in those who have had multiple surgeries and those who perform activities that put more stress on the abdomen. They usually occur within 3-6 months post surgery.

#### Post-operative Incisional Hernia with Surgical Repair Colon ends anastomosed Repair with Mesh (re-connected) in earlier procedure A. The old incision scar is re-opened Old incision over the bulge site with and the herniated inflamed left anterior hernia tissue is freed and replaced into the abdomen. Hernia sac Colostomy site taken down, stoma wound closed and bag Incisional Hernia A custom fit piece of Marlex mesh is placed over the hernia defect Rectus muscle and fascia tissue and the wounds are separate allowing closed in layers. intestines to herniate forw Marlex Mesh secured to underlying fascia with sutures Side cut-away view

### Spigelian Hernia

A spigelian hernia develops through the Spigelian fascia, between the muscle fibres of the abdominal wall, rather than protruding through the layers of fat and often occurs on the right side. It is also known as a lateral ventral hernia.



# Symptoms and Treatment of a Hernia

The symptoms of a hernia and type of hernia that a person can have vary from person to person. Commonly, you will experience some of the following:

# A visible lump or bulge

The lump or bulge that disappears when you are lying down or increases in size when standing up, straining or coughing.

### Pain

Pain, tenderness or aching in the region, particularly after completing activities such as lifting objects, walking a good distance and going to the gym. Can also experience a pulling sensation around the bulge.

### Reducible versus non-reducible

**Reducible** If the lump disappears when you lie down or can be gently pushed back into the body, it is known as a reducible hernia. Generally this means that it is not obstructed by other organs and poses no serious complications at this stage.



**Non-reducible** If the lump resists when it is pushed back and does not flatten out when you lie down, it is known as a non-reducible hernia. This can indicate that a loop of bowel has become trapped. If your hernia is non-reducible it is very important to seek medical advice.

# Surgery to Repair Hernia

A hernia repair is a very common procedure and can be performed as a day procedure, but sometimes requires an overnight stay in the hospital. The operation may be performed as an 'open' or 'laparoscopic' surgery.

### Open Hernia Repair

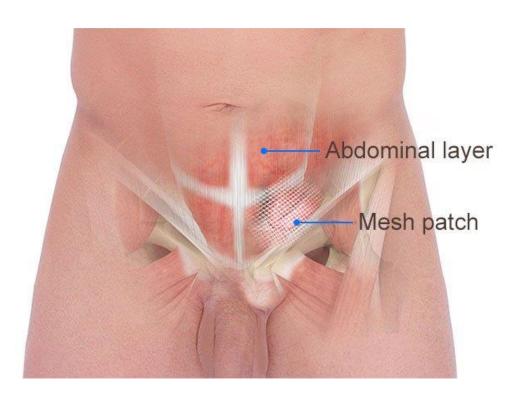
In an open hernia repair, an incision is made in the area of the hernia and the lump or bulge is returned to the normal position within the abdominal cavity. The defect in the muscle is stitched closed. The use of a mesh safely reinforces the area of weakness and strengthens the abdominal wall. The mesh becomes part of the body and reduces the risk of hernia recurrence.

### Laparoscopic Hernia Repair

A laparoscopic hernia repair is a minimally invasive technique where three incisions are made into the abdomen to repair the hernia. Carbon dioxide (CO2) gas is blown into the abdominal cavity to improve visibility for the surgeon. A laparoscope is then inserted into one of the incision sites that projects a visual image of the abdominal cavity onto a monitor. Two surgical instruments are inserted through the other incision ports to reduce the hernia. The use of mesh safely reinforces the area and strengthens the abdominal wall. The mesh becomes part of the body and reduces the risk of the hernia recurrence.







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