

## What is Hernia?

A hernia occurs when the layers of the abdominal wall weaken then bulge or tear. The inner lining of the abdomen pushes through the weakened area to form a balloon like sac. This, in turn, can cause a loop of intestine or abdominal tissue to slip into the sac, causing pain and other serious health problems.

There are different types of hernias like, Inguinal Hernia, Incisional Hernia, Umbilical hernia, Lumbar Hernia.

### **Inguinal hernia**

Protrusion or bulging in groins which increases more on coughing, crying, and straining can be inguinal hernia. More commonly found in smokers, patients with asthma or lung disease chronic constipation or with history of operations such as prostatectomy or appendectomy. All symptomatic patients require surgery to prevent complications such as incarceration or strangulation of bowel which can lead to life threatening complications. The lax abdominal wall is strengthened with help of prosthetic mesh which is inserted by Open or Laparoscopic method. Patient is usually discharged on same or next day and can resume work early. Laparoscopic Inguinal Hernia surgery has potential advantage of larger area of protection and minimal post operative pain.

### **Incisional hernia**

It is the protrusion of organ or tissue through abdominal wall that has been weakened due to previous surgery. The balloon like sac may trap intestine or other abdominal content which could cause potentially serious problems requiring emergency surgery. Patient notices bulge at site of scar of previous operation or adjacent to it. Associated risk factor such as wound infection, emergency procedure, obesity is usually noticed in history. Diagnosis is usually clinical and very small hernia presenting with pain without prominent bulge in obese patients may require ultrasound and CT scan for confirmed diagnosis. Surgery is the main modality of treatment with either open or laparoscopic approach or putting large prosthetic mesh to strengthen the abdominal wall. Patient has shorter hospital stay with laparoscopic approach and can resume duties faster.

### **Umbilical hernia**

It is protrusion or bulge present at umbilicus due to defect in umbilical scar. It is seen in both children and adults. In adults it is mostly due to extreme obesity, prolonged labour or large

intrabdominal mass. It is more common in women. It presents with bulge at umbilicus with straining along with dull dragging pain. If bowel is entrapped it presents with distension of abdomen and vomiting. Immediate repair after diagnosis should be the rule for the fear of strangulation of bowel as neck is narrow. Infants can be managed non operatively with observation as defects usually close spontaneously up to 4 years of age if defect is less than 2 cm in diameter. In adults this defect requires surgery to close either open or laparoscopic method. Laparoscopic method has added advantage of larger area of abdominal wall coverage with minimal pain and reduced hospital stay.

## **Lumbar hernia**

This type of hernia present with bulge in loin region which contains abdominal contents, though it is seen rarely. They are mostly related to previous urologic surgery such as nephrectomy which exacerbates inherent weakness in lumbar area. It can present as vague back pain, urinary obstruction or bowel obstruction. There is palpable postero - lateral mass which is usually reducible on lying down. Repair is performed either laparoscopically or via an open approach using mesh in both cases. Laparoscopic Surgery has an added advantage of minimal pain and reduced hospital stay.