

## HEPATOBIILIARY AND LAPAROSCOPIC SURGERY

### A breach in the wall

A hernia occurs when the intestines breach through a weakness in the abdominal wall, causing discomfort and sometimes, pain.



**Dr Tay Khoon Hean**  
*Hepatobiliary Surgeon*

**L**ike a protective shield, the muscles of the abdominal wall have a security function – preventing organs of the abdomen from falling out. When a weakness or tear occurs in this wall of muscle, part of the intestine may bulge and appear as a lump under the skin. This condition is known as a hernia. Hernia is most common in the abdomen, but it can also occur in the upper thigh, belly button and groin.

#### Causes of hernia

A hernia is caused by a combination of pressure within the abdomen and muscle weakness. The sudden pressure from vigorous exercise, lifting heavy weights, coughing, even straining on the toilet can weaken or cause a tear in the abdominal wall. In some cases, a hernia can arise due to an existing congenital weakness around the umbilicus (umbilical hernia) or under the scar of an operation (incisional hernia).

Inguinal hernia is the most common type of hernia. It

occurs when the intestines push through a weak spot or tear in the lower abdominal wall near the groin in an area called the inguinal canal. This is where the lower abdomen meets the thigh. An inguinal hernia is more common in men than women. This is due to a defect in the closure of the inguinal canal. Typically, a male's testicles descend the canal shortly after birth and the canal is meant to close almost completely. When the canal does not close properly, the area is weakened and more prone to hernia.

A hiatal hernia is an internal hernia. It occurs when part of the stomach protrudes through a rupture in the diaphragm into the chest. This is most common in those over 50 or in children with a congenital defect.

#### Bulging signs

A hernia can develop quickly or over a long time. Sometimes, the first signs include mild pain and a feeling that something has 'given way'. There may be a painless lump that gets bigger

when you cough or sneeze. Common symptoms of an inguinal hernia include:

- Weakness, pressure, or 'heaviness' in the abdomen
- Pain or discomfort (usually in the lower abdomen), especially when bending over, coughing, or lifting objects
- A burning, gurgling, or aching feeling at the site of the bulge


Symptoms of a hiatal hernia include:

- Acid reflux (a burning sensation in the throat or chest)
- Chest pain
- Difficulty swallowing

#### Diagnosis and treatment

If any of these symptoms arise, see a doctor and confirm the diagnosis. Except for umbilical hernia, all other hernia benefits from surgery. Umbilical hernias typically heals by itself within four years, making surgery unnecessary.

For all other hernias, the standard treatment is conventional hernia repair surgery or herniorrhaphy. While most hernias are not immediately life-threatening and can be monitored, there is a risk that an untreated hernia strangulates or has its blood supply cut off. This requires an emergency operation to prevent intestinal obstruction, intestinal perforation, shock or even death.

Surgery involves repositioning the herniated tissue and removing the oxygen-starved part of the organ if strangulation has occurred. The damaged muscle wall is repaired with a special synthetic mesh or tissue. Surgery for hernia can be done using a laparoscope, which requires smaller incisions, and by open surgery. 



#### Tay Khoon Hean Surgery

6 Napier Road  
#08-02 Gleneagles  
Medical Centre  
Singapore 258499  
Tel: 6471 1221  
www.tkhsurgery.com