**HERNIA**

A hernia is the protrusion of abdominal contents through an opening in the body wall. Hernias can be either congenital or acquired and can occur either through natural openings or induced ones. In calves, the most common form of hernia is the umbilical hernia where potions of the abdominal contents protrude out through the natural opening in the ventral abdomen left by the umbilicus. There is a risk that a loop of intestine can slip though the opening and become twisted. This is referred to as a strangulated hernia and it is a surgical emergency.

Uncomplicated and strangulated hernias are heritable, which means they can be passed on genetically from one generation to the next. Not all individuals carrying the gene will have a hernia themselves. They can merely be carriers of the gene, passing it on to the next generation. These hernias are usually present from birth and they tend to grow bigger as the calf grows older.

The umbilicus in newborn calves consists of the urachus, a tube that connects the fetal bladder to the placental sac, and the remnants of the umbilical vessels that transported blood between the fetus and its mother. Normally, just after birth, these structures shrink until only tiny remnants remain within the abdomen. If bacteria gain entry through the umbilicus, however, those remnants can become infected and require surgical removal.

**Classification**: -

**Hernia classified according to the cause**:

**1- Congenital:**Abnormal widening of the hernial canal or incomplete closure or failure of the abdominal wall to complete close.

**Aquired:** As a result of trauma.

**II- According to the clinical symptoms:**

**Reducable hernia**: The content can be reduced inside the abdominal cavity.

**Irreducable hernia:** The content cannot be reduced inside the abdominal cavity as a result of inflammation and adhesions of the content with the sac.

**Incarcerated hernia:** Also, the content cannot be reduced inside the abdominal cavity but as a result of small hernial opening and oedema which followed by necrosis of the herniated part as a result of incarceration.

**III- According to the anatomotopographical position of the hernia:**