

## UMBILICAL HERNIA

It is the protrusion of the proper peritoneum with part of the abdominal content through the wide umbilical ring and in which the skin is intact. The content may be part of the omentum/loop of intestine/both together. It is common in calves and foals.

### *Causes:*

- ✓ Hereditary: Failure of the abdominal wall to completely closed at the umbilicus.
- ✓ Severe contusion/trauma.
- ✓ Improper fixation/casting the animal.
- ✓ Improper handling of the animal at birth by manually breaking the cord instead of allowing it to break naturally.
- ✓ Increase in the intra-abdominal pressure in cases of pregnancy, parturition, colic, tympany, defecation and micturition.
- ✓ Umbilical abscess which causes weakness of the abdominal muscles at this site.

### *Symptoms:*

- ✓ Spherical, rounded, oval/pear-shaped swelling at the region of the umbilicus.
- ✓ The swelling is cold and painless.
- ✓ The swelling can be reduced easily by pressure with fingers/when the animal lying in a dorsal position.
- ✓ The hernial ring can be palpated easily and having a different forms and sizes.
- ✓ Palpation of the content: When the content is intestine you can hear the peristaltic movement and after feeding the size of the hernia will increased and having a tympanic sound. In cases of omentum the consistency of the swelling is soft and having a dull sound.

### *Differential diagnosis:*

The umbilical hernia must be differentiated from abscess, cyst, tumor and hematoma.

### *Treatment:*

The fact remains that most small hernias in young animals are self-reducing. In foal wait until it is 6 - 12 months old before beginning surgery.

### *Conservative treatment:*

- ✓ Adhesive plaster/pressure bandage.
- ✓ Belts to encircle the abdomen and cover the hernia. The pressure of the belt reduces the hernia and allowing fibrosis of the hernial ring to proceed and thus close the opening.
- ✓ Skewers: Steel rods, 10 - 12 cm long, one end is bent at right angle to permit handling and the other end is sharp. When the animal in dorsal recumbancy the surgical site is prepared and disinfected. The hernia is reduced, one skewer is put through the sac transversally and the second is then placed at right angle to the first. 8 - figure ligature is placed between the skewers and body.
- ✓ Metal clamps/wooden clamps: are applied to the fold of the skin after reduction of the content of the hernia.
- ✓ Counter-irritants have been used freely in the past to stimulate the process of cauterization. Hydrochloric/sulphuric acid was applied over the hernial sac. It is made by glass rod dipped in the acid and a few longitudinal and transverse lines were drawn over the sac. Also, the irritant can be injected around the hernial ring to stimulate fibrous tissue formation and closure of the ring.