Hernia

A **hernia** is the abnormal exit of tissue or an organ, such as the bowel, through the wall of the cavity in which it normally resides

Causes

1- Straining in constipation, diarrhea, or parturition.

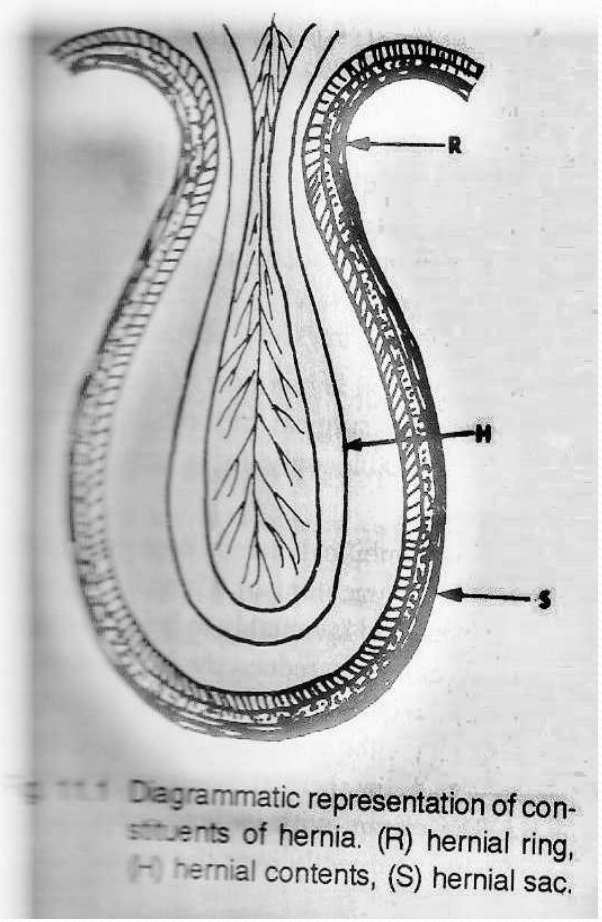
2- Falling on blunt object - stone during casting.

3- Kicking/ butting by the neighboring animal.

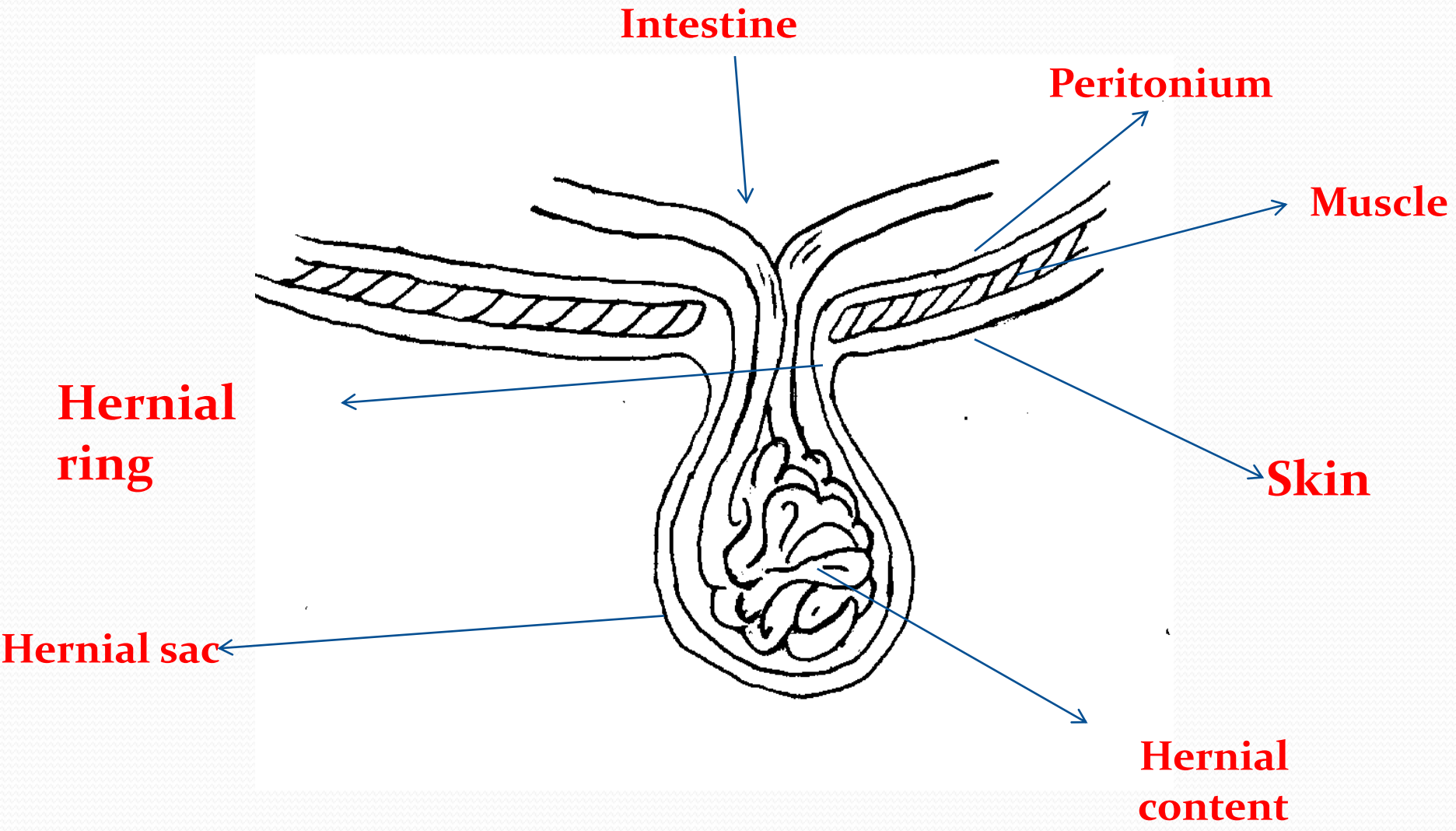
4- Swallowing of foreign object along with feed and fodder.

Hernia is characterized by p

- Hernial ring,
- Hernial sac, and
- Hernial content



Diagrammatic representation of constituents of hernia. (R) hernial ring, (H) hernial contents, (S) hernial sac.



Parts of Hernia

Stages of hernia

1- The wall weakens or tears

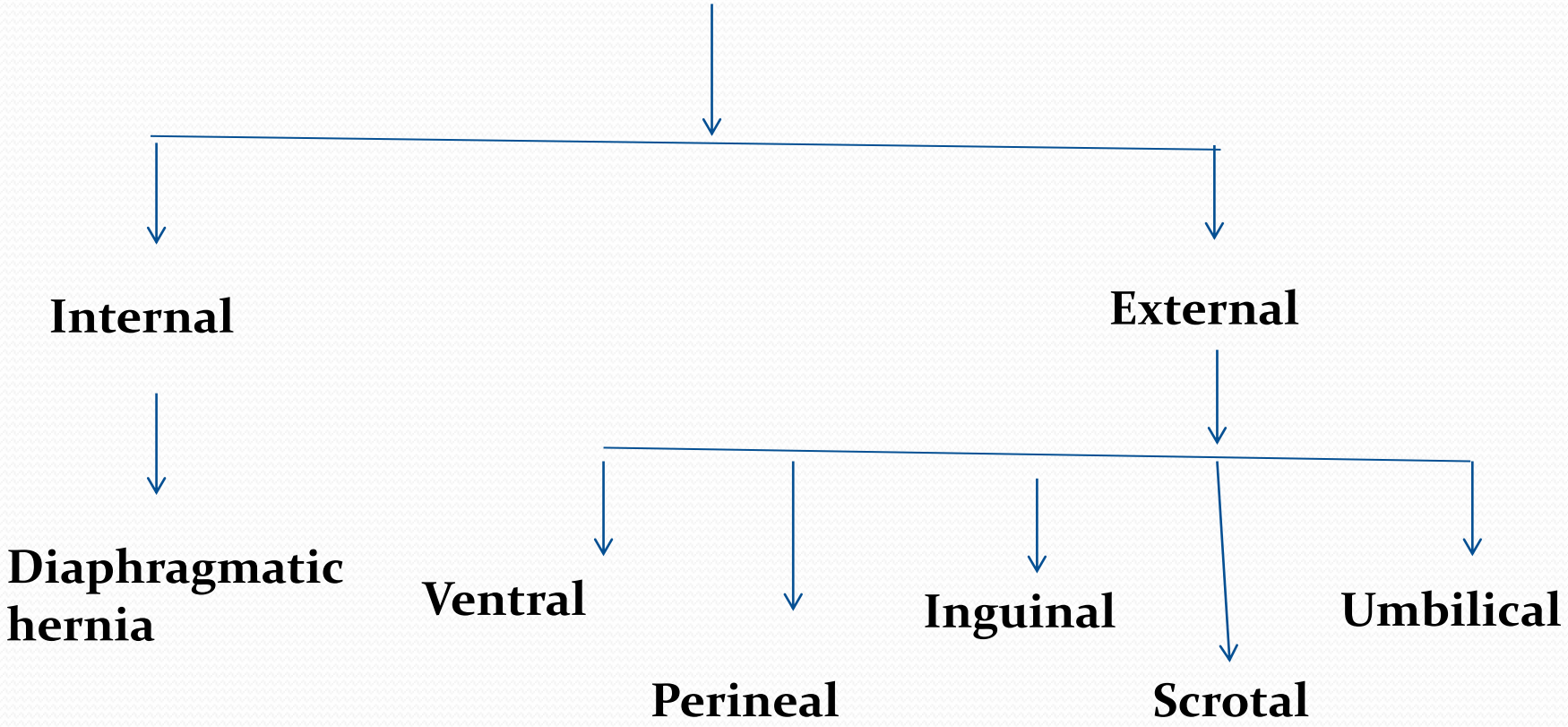
2-The intestine pushes into the sac

Stages of hernia

3- The intestine may become trapped

4- The intestine may become strangulated

Classification of hernia based on location



1. Internal hernia

where an organ migrates though an opening in the diaphragm.

E.g. diaphragmatic hernia and gut tie in bullock.

2. External hernia

Here the organ involved comes to lie beneath the skin and it can be following types

depending upon the location.

1- Umbilical hernia(Omphalocele): is the hernia that is noticed at the umbilical region and

it is mostly seen in young animals.

2- Inguinal hernia(Bubonocele): Is the hernia noticed at the inguinal region.

2. External hernia

3- Scrotal hernia(Oscheocele): the hernia noticed at the scrotum and seen in male animals.

4- Perennial hernia: Is the hernia noticed at the perennial region i.e. area below the vulva.

5- Ventral hernia: hernia seen on the areas other than the ones described above

CLASSIFICATION OF HERNIA BASED ON FUNCTIONAL ALTERATION

Reducible Hernia

Hernial content can be reduced to original position through the hernia opening.

Irreducible Hernia

Three type
1. Hernia with adhesions-addition sac and content
2. Incarcerated hernia - content is too voluminous to be replaced.
3. Strangulated hernia -necrosis and extensive adhesion due to strangulation of supplying blood vessel.

Symptoms

- Swelling of varying shape and size,
- Increases with pressure
- Can be reduced with pressure
- Consistency vary with tissues involved,
- pain may be present.
- Hernial ring can be felt

Diagnosis

1- History: asking woner about condition,

2- occurrence - sudden or slowly.

3- Examination of the patient:

4 - Palpation of swelling - can be pushed back

5- presence hernial ring can be felt.

6- Ultrasonography

7- Radiography

Differential diagnosis

Hernia be differentiated from

1- Abscess: swelling occur slowly, can't be reduced, pain.

2- Hematoma: seen along the course of vessels and it can't be reduced.

3- Skin tumor: swelling hard can't be reduced,

can be lifted along with the skin.

Preparation site

TREATMENT

By herniorrhaphy

Anaesthesia

Large animals- light sedative in case of aggressive animals.

Xylazine = 0.03mg/kg BW I/M.

Infiltration of local anesthesia with 2%lidocaine HCL with the help of 22G spinal needle.

Small animals – general anesthesia.

Site of incision- Elliptical incision at lateral site of hernia.

Suture material- polyglactin No.1

Suture pattern - simple interrupted

Horizontal matress

Horizonntal cross-matress if hernia ring is small.

herniorrhaphy

A herniorrhaphy refers to the surgical repair of a hernia , in which a surgeon repairs the weakness in your abdominal wall.

A hernia occurs when a weak area in the muscles of your abdominal wall allows an internal part of your body to push through.

If you have a direct hernia, which bulges from your abdominal wall, the surgeon will push the bulge back where it belongs and then repair the weak spot in your muscle wall by stitching the edges of the healthy muscle tissue together.

When the area of muscle to be repaired is large, surgeons may sew a synthetic mesh over it to reinforce it. This procedure is referred to as a hernioplasty.

Post operative care

Apply: Liq. povidone iodine

Oint. Betadine

Apply tight bandaging and advice for rest.

Daily dressing of wound is done if necessary

Antibiotic therapy at least for 3 days.

Skin suture is removed after 7 days of operation

Thanks