

VENTRAL EPIPLO-HYSTEROCOELE INA PUG

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SUMMARY

A six-year-old female Pug was reported with soft swelling on the left inguinal region. Swelling was gradually increasing in size since last 2-3 months. The dog had normal feed and water intake and no sign of illness except swelling causing difficulty in movement of left hind limb. Clinical, radiographic and ultrasonographic examinations diagnosed the swelling to be ventral hernia having omentum and uterine horns in the content. Physiological and haematological parameters were within the normal limits. Herniorrhaphy was performed under general anaesthesia after reducing the contents and opposing the abdominal muscles to close the internal inguinal ring. The animal had recovered uneventful.

Keywords: Herniorrhaphy, Hysterocele, Uterine horns, Ventral hernia

Ventral epiplo-hysterocele refers to the herniation of gravid or non-gravid uterus along with omentum through a defect in the abdominal musculature. Ventral hernias are common in pregnant large animals but it is also seen rarely in old dogs and cats with weak abdominal musculature (Jackson, 2004). The common contents in the hernial sac include fat, uterus, omentum, bladder and ovary (Byers *et al.*, 2007; Kalitha *et al.*, 2012; Simon *et al.*, 2013).

The common site for hysterocele in dogs is inguinal region. Herniation of non-gravid uterus is common in dogs, whereas in large animal's herniation mostly occurs in last trimester of pregnancy (Craig, 2000). In this case report, a rare case of ventral hernia involving the omentum and non-gravid uterus in a pug and its surgical management is placed on record.

A six-year-old female pug was presented with the complaint of swelling in the left ventral inguinal region which was gradually increasing in volume since last 2-3 months (Fig. 1). There was no history of trauma, vomition or constipation in recent past. Animal was taking feed and water normally, passing urine and faeces normally. On physical examination, the swelling was soft, fluctuating viscera, non-painful and a hernial ring was palpable suggesting a ventral hernia. The hernial contents were reducible. Ultrasonographic examination revealed hypoechoic circular mass surrounded by well-defined hyperechogenic margins suggestive of involvement of soft tissue structures resembling the uterus (Fig. 2). Physiological and haematological parameters *viz.*, rectal temperature, heart rate, respiratory rate, Haemoglobin, PCV, TEC, TLC and DLC were within the normal clinical range. It was decided to correct by herniorrhaphy for the repair of hernia considering the healthy condition of the pet.

The animal was fasted overnight and the surgical site was prepared aseptically. Anaesthesia was achieved by intravenous administration of mixture of xylazine hydrochloride @ 1mg per kg body weight and ketamine @ 5mg per kg body weight. Animal was secured in dorsal recumbency. The skin over the swelling was incised to expose the hernia sac (Fig. 3). Hernia sac was further incised to expose the hernia ring and the hernial contents that included mainly the omentum along with non-gravid uterus (Fig. 4). The contents were reduced and hernia ring was repaired by lock stitch pattern using Vicryl No. 1. The muscles, subcutaneous tissue and skin were closed as per standard procedure. Postoperatively, analgesics and antibiotics was administered parenterally for five days. Daily wound dressing using povidone iodine solution and application of fly repellent spray was also advised. Skin sutures were removed on 14th postoperative day. The animal recovered without any post-operative complications.

Hysterocele usually do not interfere with gestation nor will it give rise to any serious complications (Craig, 2000). Physical examination and ultrasonography are useful tools for the diagnosis of the condition (Martin *et al.*, 2001; Nak *et al.*, 2004; Noakes, 2001; Serin *et al.*, 2009 and Simon *et al.*, 2013). If the hernial ring is of sufficient size and in favourite position, pregnant uterus may pass into the sac, foetus develops there, creating dystocia demanding caesarean section. The surgical approaches in management of inguinal hernia in dogs include incision over the inguinal ring (Waters *et al.*, 1993) and incision on the lateral aspect of hernia parallel to flank fold (Smeal, 1993). In this case, since the major visceral organ involved was omentum along with the uterus, the animal did not show any signs of constipation or vomition nor did it have any serious complications prior to the clinical presentation.

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Fig. 1. Swelling on the left ventral abdomen

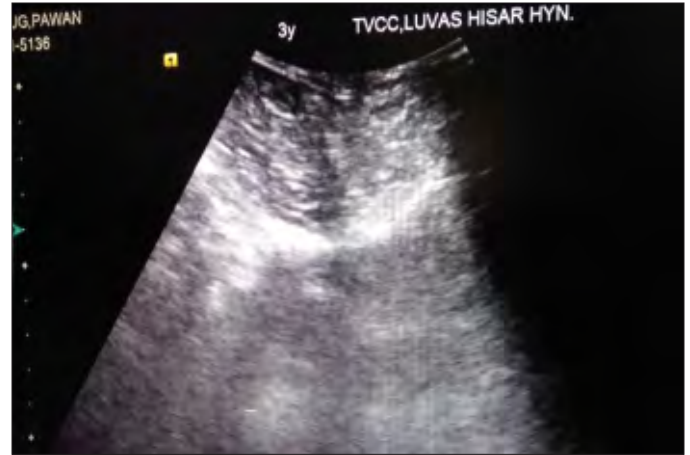


Fig. 2. Ultrasonography over the swelling showing soft tissue density



Fig. 4. Hernia ring and hernial contents



Fig. 3. Hernia sac exposed after skin incision

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