REPAIR OF RUMINO-ENTERO-OMENTOCELE (VENTRAL HERNIA) IN A COW- A CASE REPORT

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ABSTRACT
A cross bred Jersey cow presented to the Large Animal Surgery Unit of Madras Veterinary College Teaching Hospital with the history of swelling in the left ventral abdomen. Clinical examination, ultra sound examination and exploratory laparotomy revealed herniation and hernia repair was attempted. The size of hernia ring was 7.5 cm diameter and the organs herniated were ventral sac of rumen, intestine and omentum, kelotomy was performed, organs were repositioned and the herniated ring was closed by overlapping sutures. The incisional site was reinforced with fascia and the skin was apposed with interrupted suture pattern. The present communication deals with surgical management of rumino-entero-omentocele (ventral hernia) in a cow.

Key words: Ventral hernia, Buffalo

INTRODUCTION
Hernia is the protrusion of the contents of a body cavity through a normal or abnormal opening in the wall of the cavity. Ventral hernia is commonly seen along the costal arch, high or low in the flank, between the last few ribs or in the ventral abdominal wall near the mid line. Ventral hernias occur generally as a result of external forces or trauma to abdominal wall (Radhakrishnan et al., 1993), automobile accident (Vijayanand et al., 2009), weakening of the abdominal musculature or rupture of prepubic tendon (Arthur, 1989).

Case History and Observations
A 10 year old cross bred Jersey cow was presented to the Large Animal Surgery Unit of Madras Veterinary College Teaching Hospital with the history of swelling at the left ventral abdomen (Fig.1). Based on the clinical examination, palpation, rectal examination, needle aspiration, ultrasound, radiography it was diagnosed as hernia and decided to perform herniorraphy after exploratory laparotomy.

Treatment
The cow was kept off feed and water for 48 hr and 24 hr, respectively before surgery. The surgical procedures were carried out under paravertebral nerve block and inverted “T” block under 2% lignocaine hydrochloride. The animal was restraint in standing position and the area was prepared aseptically for surgery. Mid flank incision of 20 cm long was made on the skin. The skin and muscle were incised, exploratory laparotomy was performed and hernia ring was detected. Muscle and skin incision was closed as per standard procedure.

Hernia repair was performed under 2% lignocaine hydrochloride local infiltration and sedation with xylazine hydrochloride (0.1mg/kg body weight). Animal was restrained on right lateral...
**Fig. 1**: Swelling in the left Ventral abdomen.

**Fig. 2**: Peritoneal fluid with Fibrin clots.

**Fig. 3**: Hernial ring.

**Fig. 4**: Herniated rumen (1), Omentum (2), intestine (3).

**Fig. 5**: Recovery after surgery.
recumbency. Left lower flank skin incision was made approximately 15 cm long cranio-caudal direction. Nearly 3.0 Ltr of straw colored fluid was drained out, fibrin clots (Fig.2) were removed and hernia repair was attempted. The size of the hernia ring (Fig.3) was 7.5 cm diameter and the organs herniated were ventral sac of rumen, intestine and omentum (Fig.4). Adhesions were removed by blunt dissection and kelotomy was performed. Organs were repositioned and the hernia ring was closed by overlapping sutures using no.3 silk in horizontal mattress pattern. The incisional site was reinforced with chromic catgut no.3 in interlocking suture pattern. Dead space was obliterated by fixing loose skin with abdominal muscle. Excess skin was trimmed off and reinforced with simple interrupted suture pattern using no.3 silk in vertical mattress suture pattern.

Post operatively animal was maintained on fluid therapy, antibiotics (Gentamycin and benzathine penicillin) and non steroid anti-inflammatory drug (Meloxicam) for a period of 10 days. Suture removed on 10 day post-operative day and animal was discharged on 14th day.

REFERENCES