Ventral hernia in an Ongole cow: A case Report

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In animals ventral hernia occurs due to any trauma such as a kick, blow, horn thrust or falling on blunt objects and rupture of pre pubic tendon (Frank, 1981). Hernia, though a common condition, is generally ignored by the owners unless it produces grave symptoms. Ventral or lateral 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 (Berge and Westhues, 1966). In the present paper a case of ventral hernia and its surgical treatment in a post parturient cow was described.

Case history and clinical signs

A cow aged 8 years weighing about 300kg presented to the veterinary poly clinic, gudiwada with the history of swelling at the left lower flank region. History reveled that the animal was calved 30 days back. Initially a small swelling observed immediately after parturition which enlarged gradually to the size of foot ball there after. The animal was showing broad stepping gait (Abduction) at the time of presentation. All the vital signs observed were with in the normal range. On examination, there was a large swelling on left lower flank extending ventrolaterally below the stifle skin fold. No evidence of external injury was noticed. On palpation swelling was soft in consistency and revealed its irreducible nature. Hernial ring could not be palpated. On needle aspiration, red tinged serous fluid was noticed.

Treatment

The animal was kept off feed for 24 hours and water was with held for 12 hours prior to the surgery. Animal was prepared for aseptic surgery as per the routine procedure. The animal was premedicated with Triflupromazine hydrochloride (Siquil, Zydus Animal Health Ltd., India) @ 0.05 mg/kg bwt intramuscularly followed by local infiltration at the site using 2% lignocaine. The animal was controlled in right lateral recumbency. An oblique linear cutaneous incision of sufficient length was made on the swelling. The underlying fascia and tissues were incised by blunt dissection. Yellowish cheesy fibrinous mass was noticed around the herniated mass which easily peeled off by gentile manipulation. The entire hernial mass was adhered to the surrounding skin and abdominal muscles which were removed manually. Loops of small intestines, which were strangulated, noticed as henial contents. Hernial contents were voluminous, edematous and congested. Intestinal loops at the site of adhesions were devitalized and peeled off even on gentile pressure. Hence, necrosed part of intestine was removed and healthy part of intestine was anastomosed by inversion suture pattern using no.0 chromic cat gut. Hernial ring was larger in diameter hence hernioplasty was performed using a synthetic, nylon mosquito net in double layer with silk suture. The overlying muscles were sutured in simple continuous suture manner using no.2 chromic cat gut followed by skin closure using silk by horizontal mattress. The surgical incision was protected with an antiseptic pad. Post operatively animal was treated with strepto-pencillin @ 2.5gm and Melonex @20ml/day intramuscularly. But the animal died on 2rd post operative day.

Discussion

As observed in the present case, adhesion formation can be a major complication of any abdominal hernias. Presence of large quantities of yellow cheesy material i.e fibrin clots indicated the internal hemorrhage following injury. Hernial ring could not palpated, might be due to its voluminous and edematous hernial contents. Strangulation of intestines might have lead to necrotic changes resulted from the compromised vascular supply and venous drainage due to the compression at the hernial ring which is the common squeal of strangulated hernia as observed in the present case. Sterilized non absorbable nylon mosquito net was used for hernioplasty in the present case instead of commercial polypropylene mesh as suggested by Persania et al, (1981) because of its availability and expenditure at field level. The death of the animal might be due to toxemia developed as a result of strangulation of intestines which was evidenced by elevated vital signs during clinical

examination. Prolonged manipulation of hernial contents to remove the adhesions also might have contributed for its fatality. Successful recovery of ventral hernia cases may depends up on the early presentation to the clinician and its reducible nature. However, delay in presenting the case may cause complication due to loss of muscle elasticity and adhesions between prolapsed viscera and subcutaneous tissues.

In the present case, abdominal distention due to pregnancy and or violent straining during parturition might have lead to weakening of the abdominal muscles and resulting in ventral hernia and is in agreement with findings of Thyagi, 2002.

References

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