Surgical Management of Jejunal Evisceration through Rectal Injury in a Hallikar Bullock

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Very few reports are available in veterinary literature where in the intestinal loops have protruded through a rectal tear in cattle and found suspended through the anus following accidental trauma. Various causes for rectal tear in females include iatrogenic trauma by the veterinarian (iatrogenic), dystokia, breeding accidents and trailer accidents (Tyagi and Singh, 1993). The present paper puts on record a rare case of jejuna evisceration through a rectal injury in a Hallikar bullock and its successful surgical management.

Case History and Observations
An eight year-old Hallikar bullock was presented to veterinary hospital, Dharwad with a complaint of intestinal protrusion from the anus following an accident and not passing dung. Following per rectal examination, a grade – 4 rectal tear approximately at 30 cm proximal to anus was diagnosed through which intestinal loops with mesentery had herniated and were protruding from the anus. The tear in the rectum was forming a bottle neck, so that the intestinal loops could neither be pushed into the abdomen nor be pulled out of the anus. The prolapsed portion of the intestine was blue and showing signs of necrosis in some places and there was tear in mesentery (Fig I). So it was decided to perform enterectomy, reduction of the mass and closure of rectal tear by para anal surgical approach.

Treatment and Discussion
Animal was positioned in right lateral recumbency under Xylazine sedation and epidural analgesia with 2% Lignocaine HCl. The rectal tear was extended per rectally. The necrosed intestines and mesentery were pulled out through rectal tear and then intestinal resection and anastomosis was performed, using Chromic catgut No-2-0. The anastmosed intestine was repositioned back in the peritoneal cavity after flushing it thoroughly with 1% Povidone Iodine – Normal saline solution. Due to lack of space for repair of rectal tear via anus, it was repaired by applying a layer of closely placed simple interrupted sutures with knots being placed inside the rectal lumen via Para anal approach (vertical incision, on left side of anus in the Ischio-rectal fossa) using Chromic catgut no 1-0. Surgical wound was closed routinely. Postoperatively, Inj. Ceftriaxone and Tazobactum (Intacef – Tazo, Intas pharmaceuticals) @ 25 mg/kg, bw i/v BID and Inj. Ketoprofen (Ketop, Alembic) @ 2 mg/kg bw i/m were given daily for seven days and Inj. Dexamethasone (Vetcort, Alembic) @ 2 mg/kg bw i/v was given daily for three days. Following surgery, the animal started passing dung with little straining. So 500 ml of liquid

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Fig 1. The prolapsed portion of the intestines was blue and showing signs of necrosis in places and a tear in mesentery.
paraffin and 400 g of magnesium sulphate were orally administered daily for 5 days to soften the fecal consistency. Animal was infused with 3 l of normal saline and 2 l of RL daily for 3 days to increase intestinal perfusion. Animal was maintained on greens and gruel. The wound was dressed regularly and sutures were removed on 10th postoperative day. The animal started passing dung normally and recovered uneventfully.

Rectal surgery is relatively tedious because of its peculiar location and inaccessibility. In case of proximal rectal tears which cannot be reached through anus, right flank laparotomy facilities the repair. Saini and Mahindroo (2007) used right flank approach in a calf with similar condition. But in this case para-anal approach for proctorrhaphy was successfully employed as the rectal tear was in the pelvic cavity.

Few reports are available in Veterinary literature where, in cattle, the intestinal loops had protruded through a rectal tear (Tyler et al., 1998, Charmillot, 1976 and Saini and Mohindroo, loc. cit) and suspended through the anus following accidental trauma. However, a vaginal evisceration of jejunum has been reported in a cow (Tulleners, 1984). In all these reports, post-surgical peritonitis leading to death was reported. However in the present case there was prompt recovery which may be attributed to early presentation of the case; lack of seepage through the site; thorough lavaging of the pelvic cavity with 1% povidone iodine – normal saline prior to closure of para anal incision site to remove contamination; use of higher Antibiotics, NSAIDS and Steroids and inherent property of localization of peritonitis if any, in ruminants.

References

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