

Case Study

Management of Pre-Partum Recto-Vaginal Prolapse in a Cow

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ABSTRACT

Keywords

Cow,
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Cervico-vaginal prolapse is a common complication in pluriparous cows and buffaloes due to relaxation of pelvic ligaments in mid to late gestation. A successful management of pre-partum recto-vaginal prolapse in a cow is recorded.

Introduction

Rectal prolapse is a protrusion of one or more layers of the rectum through the anus (Ettinger and Feldman, 1995). The condition may be a result of prolonged tenesmus or increased intra-abdominal pressure. Cervico-vaginal prolapse is a common complication in pluriparous cows and buffaloes due to relaxation of pelvic ligaments in mid to late gestation. Although it may be of multiple etiologies but placental estrogen production during second half of gestation in cattle causing relaxation of pelvic ligament, vulva and vulval sphincter muscle are most feasible proposition although hereditary predisposition may not be undermined (Purohit, 2012). Other pre disposing factors include Intra abdominal pressure, peculiar gait while walking, grazing hilly terrain feed and fodder containing phyto-estrogen (Roberts, 1971). The present study described

a case of pre-partum recurrent recto-vaginal prolapse in a cow.

History and Clinical observation

An eight and half months pregnant non descript cow in its 2nd parity, was presented to Teaching Veterinary Clinical Complex, College of Veterinary Science & Animal Husbandry, Narendra Dev University of Agriculture & Technology, Kumarganj, Faizabad with the history of cervico-vaginal prolapse. Three days ago, the prolapse was occurred & repositied by local vet. On physical examination, it was found that the cow was lying in lateral recumbency, vaginal mass was completely everted & external-os was exposed (Figure 1). But due to constant irritation and straining, this time there was cervico-vaginal prolapse

accompanied with rectal prolapsed. Thus it was diagnosed a case of recto-vaginal prolapse.

Clinical Management

Caudal epidural anaesthesia was achieved by injecting 7 ml of 2% Lignocaine hydrochloride into sacro-coccygeal space. Before correction, the surrounding area of prolapsed masses was washed with soap and prolapsed masses was washed and cleaned with potassium permagnate solution (1:1000) removing debris. The prolapsed rectal mass was repositioned after reducing it by ice and retained it by purse-string suture to prevent recurrence (Figure 2). Urinary bladder was evacuated through catheterization and the prolapsed vaginal mass was reduced by ice then 4% Lignocaine hydrochloride gelly along with pulv. Neosporin 10 gms containing

Polymixin B sulphate, Neomycin sulphate, and Bacitracin zinc smeared over the prolapsed mass and repositioned it in its original position manually. To prevent recurrence of vaginal prolapse, two horizontal mattress sutures using sterile shoe lashes were applied through vulva involving perineum skin (Figure 2). The cow was treated with injection Ceftriaxone (3 gms I.M. for 5 days), Intalylte (500 ml, I.V. on the first day), Meloxicam (50 mg I.M for 3 days), Calcium borogluconate (450 ml, I.V. on first day), Anistamin (15 ml I.M. for 2 days). Owner was advised to apply 2 % lignocaine HCl gelly into anal sphinter after every defecation and to keep animal on laxative diet for a week. Careful observation for 5 days confirming non recurrence of prolapsed, sutures were removed and animal calved to a female calf two week after parturition.

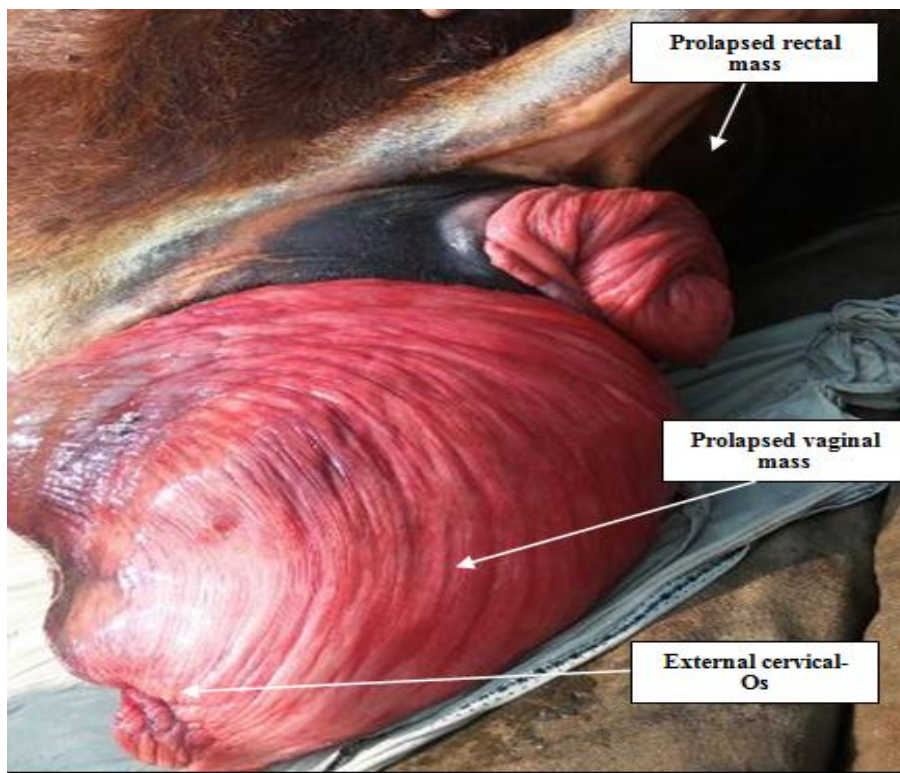
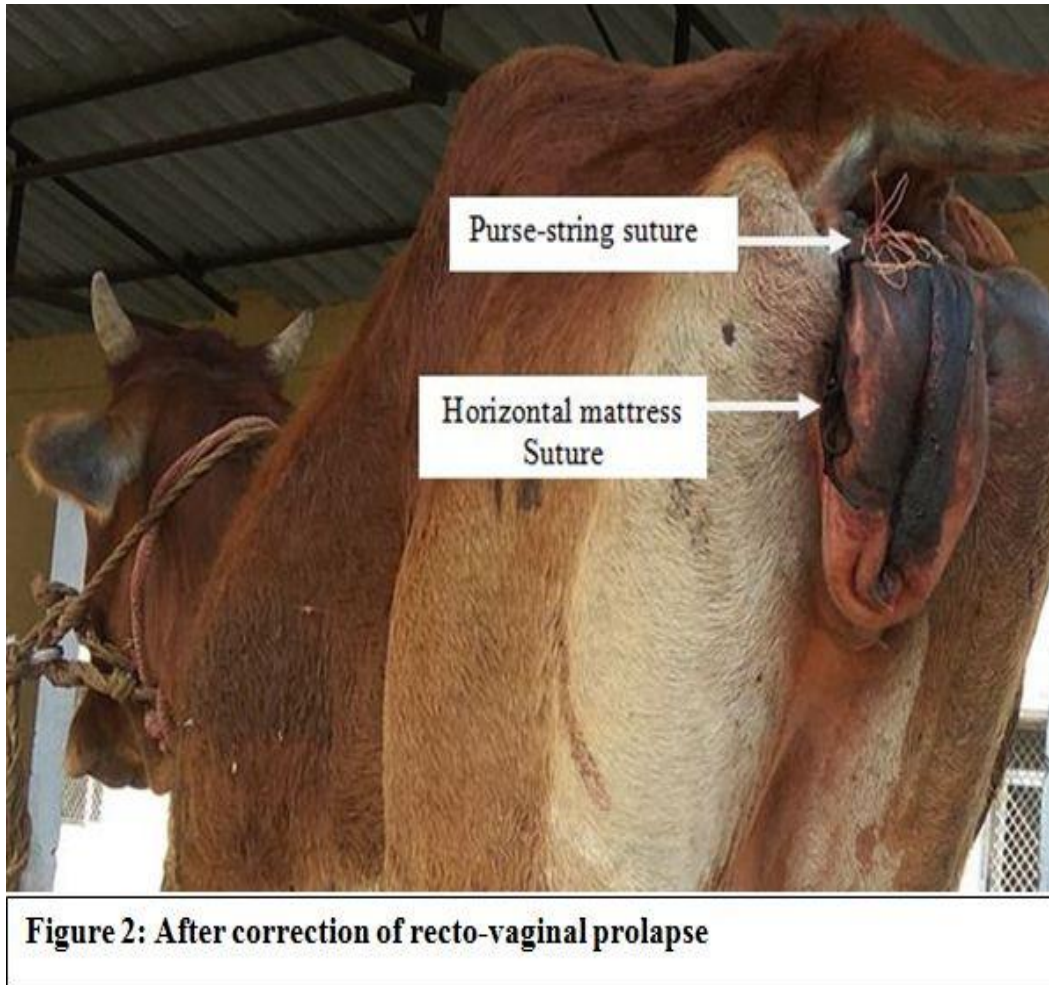


Figure 1: Recto-vaginal prolapse in the cow



Discussion

The hormonal alterations or changes taking place at last trimester of pregnancy is believed to be primary cause for prolapse especially estrogen that cause for prolapse especially estrogen that causes relaxation of pelvic ligaments and surrounding soft structures (Wolfe, 2009). Cervico-vaginal prolapse is a hereditary trait and due to nutritional imbalance contributing to prevalence of vaginal prolapse (Margaux, 2011). More specifically poor quality forage, high level of concentrate, high estrogenic content feeds and hypocalcemia have all been connected with pathology (Mienser and Anderson, 2008).

Conclusion

In present case study successful therapeutic management of vaginal prolapse associated with rectal prolapse in a cow was reported.

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