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Post-Partum Prolapse of Genitalia in a Cow

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ABSTRACT

Present case report describes resolving a case of postpartum prolapse of genitalia in a cow associated with retention of fetal membrane after medical treatment and manual intervention.

***Keywords*:** Cow, Fetal membrane, Post-partum, Prolapse.

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INTRODUCTION

Prolapse or eversion of the uterus is also called casting of the "wethers" or casting of the "calf bed." It most commonly occurs in the cow, buffalo, ewe, occasionally in sows and does, and rarely in mare, bitch and queen (Deori *et al*., 2023; Dutt *et al*., 2023; Hadiya *et al*., 2023; Manokaran, 2023). It is observed most commonly in parous dairy cows immediately after parturition or within 24 hours when the intra-abdominal pressure is high and occasionally up to several hours afterward. In rare cases, it may occur 48 to 72 hours after parturition. Weak myometrial contractions during the postpartum period and traction during dystocia are two major causes of uterine prolapse. Hypocalcaemia (Kasturi *et al.,* 2017) and elevated blood oestrogen levels have also been associated with uterine prolapse.

CASE HISTORY AND OBSERVATIONS

A six-year pluriparous (3rd parity), nondescript post-parturient (two days) cow with a history of normal calving, prolapse of genitalia previous at night with failure to expel fetal membrane was presented to RVP polyclinic Izatnagar. Upon clinical examination, prolapsed mass (gravid horn) could be seen hanging along with the attached fetal membrane. The mass was bright red, and uterine caruncles clearly visible to which fetal membranes were attached. Animal was straining, reluctant to move, rectal temperature was 101, conjunctival mucous membrane was pink, and the animal was off for feed and water. Uterine prolapse is considered a life-threatening condition, so treatment should be done as soon as possible.

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TREATMENT AND DISCUSSION

On arrival, the animal was restrained followed by regional nerve block (caudal-epidural anaesthesia) with an injection of 5 ml of 2% lignocaine HCl (Xylocaine) in the sacro-coccygeal (S5-Cx1) intervertebral space was given, followed by elevating the uterus at the level of vulva, then prolapsed mass was washed with cold water and $KMnO_4$ solution (1%) hydration therapy was given before reposition. Pop-in spray was applied to reduce inflammation and pain. $MgSO_4$ was sprinkled over prolapse mass to cause shrinkage and facilitate uterine repositioning. Dicrysticin-S, 5gm was sprinkled over the uterine mass to prevent the infection, and gently repositioned from the ventral side by applying pressure to the fist and keeping it up with the palm of the other hand. Afterward, the uterus was repositioned. Buhner's needle horizontal mattress suture was applied to the lips of the vulva in order to hold the uterus in place and prevent recurrence (Singh *et al.,* 2011).

Fig. A: Prolapse of gravid uterus and cervix (pre-treatment).

Fig. B: Reposition and horizontal mattress suture (post-treatment).

Postoperative treatment included injection of Ceftriaxone (Intacef) @10mg/kg body weight IM for 5 days, injection Ethamsylate (Mbloc) @10mg/kg body weight IM for 3 days to control bleeding, injection Meloxicam (Melonex) @15ml/day IV for 3 days as anti-inflammatory and analgesics, injection Belamyl @15 ml/day IM for alternate 3 days. The suture was removed after a period of seven days resulting in a favourable outcome.

In the present case, eversion of gravid horn of the uterus and cervix was suspected to have occurred after retention of the fetal membrane, which is one of the most common predisposing factors for eversion of organs. Similarly, Bhattacharyya *et al*. (2012) reported 27% (12/44) of the cows with uterine prolapse suffered from milk fever, dystocia, or retained fetal membrane. Various techniques, such as rope truss (Dharani *et al.,* 2010), horizontal mattress suture (Singh *et al.,* 2011), and Buhner's suture (Yotov *et al.,* 2013) have been introduced to prevent recurrence. The favourable prognosis in the present case and success could be because of immediate repositioning and timely management before any damage, mutilation, necrosis, or gangrene occurred.

CONCLUSION

A six-year pluriparous non-descript post-parturient cow having prolapse of genitalia with retention of the fetal membrane was presented to the polyclinic case was corrected by reduction, reposition and retention. Finally, the outcome case led to favourable prognosis, as farmers reported the incident immediately.

CONFLICT OF INTEREST

The authors declare no competing interests.

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