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Management of uterine prolapse in a buffalo using non-conventional suture material for retention

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Abstract

Uterine prolapse has been reported in all animal species; however, it is most commonly seen in pluriparous dairy cows (Roberts, 1986) [6]. Numerous risk factors, including hypocalcaemia, prolonged dystocia, foetal traction, foetal enlargement, retained foetal membranes, chronic illness, and paresis, have been proposed for uterine prolapse in cows (Risco *et al.*, 1984; Potter, 2008) [4, 3]. The tissues initially

appear practically normal after prolapse, but within a few hours they swell and become edematous. Unless the uterus is very recently prolapsed, it becomes swollen, hardened and friable, making replacement more difficult. The replacement of a fully prolapsed uterus in a cow causes considerable damage to the animal.

Keywords: Prolapse, Suture, Veterinary, Subcutaneous

1. Case history and observation

A murrah buffalo calved 8 hrs. ago, was brought to the Veterinary Clinical Complex, Mhow, with the history of straining and cervico vaginal prolapse for the last six hours. The examination of prolapsed mass revealed that there was tear on the cervix (Fig. 1) and prolapsed mass also contained an everted uterine horn. The buffalo continued to strain and within a few minutes it was converted into complete prolapse of one uterine horn. It was decided to treat the case as per standard procedure which involves reduction, reposition and retention of prolapse mass. Retention of prolapsed mass was done by Buhner's subcutaneous suture using an intravenous infusion tube.

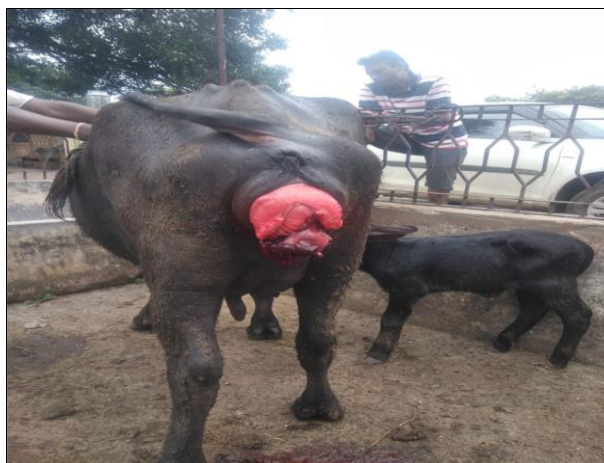


Fig 1: Cervico- vaginal prolapse with uterine horn

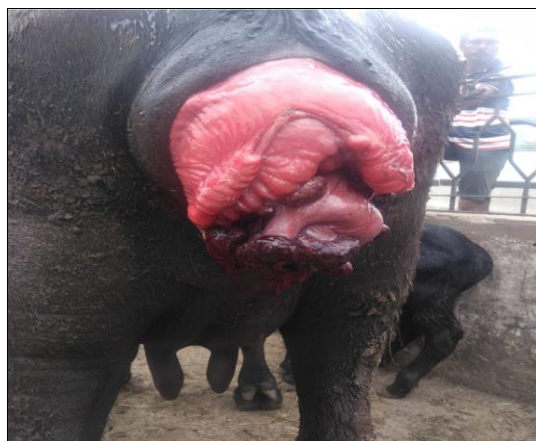


Fig 2: Cervical tearing



Fig 3: Placing of Buhner's suture

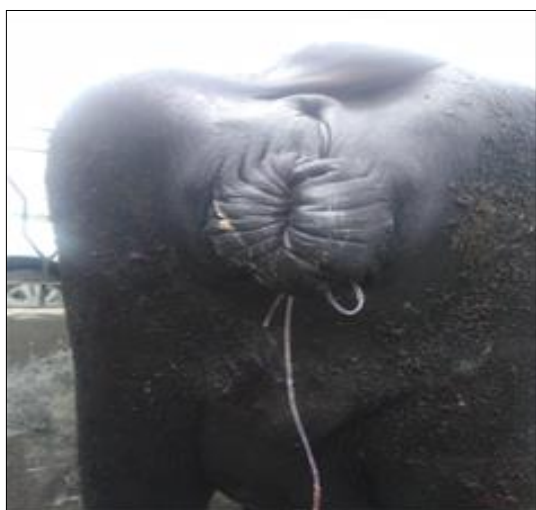


Fig 4: Final Suture

2. Treatment and discussion

To avoid excessive straining, epidural anesthesia with 2% lignocaine HCl was administered. The prolapse mass was cleaned with a non-irritant antiseptic solution and the teared cervix was repaired with the simple interrupted suturing pattern by using polyglactin 910. In the standing position of buffalo, prolapsed mass was pushed back with the help of two assistants. After a few efforts the prolapsed mass was repositioned. For the prevention of recurrence of the

prolapse, subcutaneous vulvar suture was placed using Buhner's needle. The buhner's needle was threaded with a good quality intravenous infusion tube and passed subcutaneously from the dorsal commissure through one side of the vulva to the ventral commissure and the same procedure was done for the other side of the vulva. The suturing tube was tied enough leaving the space for urination. After successful repositioning of prolapsed mass, the animal was treated with supportive treatment consisting of Inj. Ceftiofur sodium 1 gm IM, Inj. Flunixin meglumine 15 ml IM, Inj. dicyclomine 20 ml IM and Inj. Pheniramine maleate 10 ml IM. The animal was successfully recovered without any postpartum complication.

After suitable reduction, several through-and-through transvulvar suturing procedures have been tried to hold the prolapsed mass in place (Noakes *et al.*, 2001; Roberts, 2004; Bhattacharyya *et al.*, 2007) [2, 5, 1], but they are prone to tear the vulva, particularly in cases showing subsequent violent straining (Noakes *et al.*, 2001) [2]. Buhner's subcutaneous perivulvar suture application using vetafil or umbilical tape is now the method that is most used. Vetafil is relatively expensive in field conditions, and sterile umbilical tape is not always accessible. Therefore, employing an intravenous infusion tube and "modified" Buhner's approach is sufficient to keep the prolapsed mass in place.

3. Acknowledgment

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4. Conflict of Interest

The authors declare there is no conflict of interest.

5. References

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