Short Communication

DOI: 10.48165/ijar.2023.44.02.23

The Indian Journal of Animal Reproduction

The official journal of the Indian Society
for Study of Animal Reproduction

ACS Publisher
www.acspublisher.com

Year 2023, Volume-44, Issue-2 (December)

ISSN 0970-2997 ***(Print)*** *ISSN 2583-7583* ***(Online)***

Management of Post-partum Complete Cervico-uterine Prolapse in Crossbred Jersey Cow

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ABSTRACT

Post-partum uterine prolapse is a very common obstetrical problem as it affects the future breeding and production of an animal. It generally leads to delay in return to oestrus and subsequently reduction in conception rate and thus increase in the inter calving period of a female animal. In the present case, in a postpartum crossbred cow, replacement and repositioning of the cervix and uterus was done under caudal epidural anaesthesia with the horizontal mattress suture on vulva. The suture was removed after 14 days on complete recovery of the animal.

Key words: Cervico uterine prolapse, Epidural anaesthesia, Retention suture, Antibiotics.

How to cite:-Behera, H., Bhumij, B. K., Prasad, U. V. S. N., Behera, M. K., & Pradhan, T. R. (2023). Dystocia Due to Hydrocephalus Monster in A Murrah Buffalo.
The Indian Journal of Animal Reproduction, 44(2), 109–111. 10.48165/ijar.2023.44.02.23

INTRODUCTION

The common problem encountered after parturition in pluriparous large ruminants is uterine prolapse (Roberts *et al*., 1986). Uterine prolapse is described by a large mass of the uterus everted from the pelvic cavity to the outside extending up to the hock joint with separated placentomes from the caruncles (Roberts *et al*., 1982). It usually occurs within the first 24 hours after parturition and rarely occurs several days after calving. An Increase in levels of estrogen and relaxin prior to parturition makes the animal susceptible to prolapse of the uterus. Luktuke and Chaudhary (1965) reported the incidence rate of uterine prolapse to be 0.3 to 0.5%. Records on the amputation of the uterus in ruminants are scanty for keeping the animal on a religious point of view (Tyagi and Singh, 1993).

CASE HISTORY AND OBSERVATION

A crossbred jersey cow of 10 years of age weighing about 400 Kg was presented with post-partum cervico uterine prolapse at a farmer's doorstep. According to the owner of

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Received 12-08-2023; Accepted 30-11-2023

the cow, the animal delivered a live female calf two days back and was affected with uterine prolapse. The animal was treated by the local veterinarian who repositioned the uterus and sutured the vulva. But due to the continuous straining by the animal the prolapse condition reappeared again which included both cervix and uterus. The animal was lying down and was completely anorectic from the last one day.

TREATMENT AND DISCUSSION

The case was approached by the application of ice mass for two hours over the prolapsed part of recumbent cow to reduce the size. The prolapsed mass was kept over a piece of clean, dried, dirt-free cloth. Inj. Siquil 05ml i.m. (Triflupromazine hydrochloride, Zydus Pharmaceuticals) was administered to reduce the straining by the cow. After administering caudal epidural anaesthesia Lox 2% (5ml of 2% Lignocaine HCl, Neon Pharmaceuticals), the clinical examination revealed the affected prolapsed part were the right horn of uterus, cervix and a portion of the vagina. The caruncles in the uterus were found to be degenerated, brownish to black-coloured and necrotic. A huge amount of clotted masses of blood was found to be adherent to the endometrium and caruncular surface of the uterus. With gloved hand catheterization of the bladder was done to evacuate the urine present inside the bladder, so that it will be easy to replace the prolapse part inside the pelvic cavity. The whole prolapsed part was washed thoroughly three times with the help of a weak solution of potassium permanganate (0.1% $KMnO_4$, KEN Chemical Pvt. Limited) to remove all the debris including clotted masses of blood. After washing, blood was found to ooze out from the endometrial veins. So, ligation of the veins was done by using Chromic Catgut No. 02 to completely stop the oozing out of the blood (Fig 1).

Fig. 1: Ligation of the veins to stop oozing of blood

Then pressure was applied by fist on the ventral floor of the vagina, prolapsed uterus was pushed back, followed by the cervix, into the pelvic cavity. Complete repositioning of the uterus and cervix was ensured by per-rectal examination. Then retention suture was applied on the vulvar lips using a thick cotton thread that was previously dipped in betadine solution.

The animal was treated with Antibiotic Intacef tazo 3375mg i.m. (Ceftriaxone and Tazobactam, Intas Pharmaceuticals), NSAID Melonex 15ml i.m. (Meloxicam, Intas Pharmaceuticals), Antihistaminic Avilin 10 ml im (Chlorpheniramine maleate, Intas Pharmaceuticals), Haemostatic drug Texableed 20ml im (Tranexamic acid, Intas Pharmaceuticals), Inj. Siquil 5ml i.m. (Triflupromazine hydrochloride, Zydus Pharmaceuticals), Inj. Tonophosphan 10ml i.m. (Intervet India Pvt. Limited), liquid Utrifit (Intas Pharmaceuticals) orally 150ml/day, Dextrose fluid therapy 1500ml/day i.v. (Aculife Health care Pvt. Limited), Mifex 450ml slow iv (Calcium boro-gluconate, Myvet Pharma). The above-prescribed treatment was repeated for three days except for Mifex and Texableed. Removal of retention suture (cotton tape) was done after 14 days of suturing and the cow was recovered uneventually (Fig 2).

Fig. 2: Healthy animal after 14 days of treatment

Postpartum uterine prolapse condition is an emergency problem that needs to be intervened as early as possible to save and maintain the fertility of animals. Rumen tympany is prominent when the animal lies down in lateral recumbency (Noakes *et al.*, 2019). Predisposing factors like prolonged dystocia, severe straining, myometrial contractions, hypocalcaemia, hypophosphatemia, hyperestrogenism, impairment of expression of prostaglandin or oxytocin receptors, lowered uterine tonicity (flaccid uterus), forced extraction of foetus, retained foetal membranes, over relaxed pelvic ligaments, delayed cervical involution, chronic diseases and paresis favours uterine prolapse in postpartum cows (Noakes *et al.*, 2001, 2019, Jackson, 2004, Ahmed *et al.*, 2005, Hanie, 2006, Kumbhar *et al.*, 2009). The gravid horn is affected mainly as compared to the nongravid horn owing to the strong intercornual ligament. Cows with previous incidences of uterine prolapse have an extended period of calving interval (Samad *et al.*, 1987).

CONCLUSION

Timely care and management of uterine prolapse cases are of utmost important for its recovery.

CONFLICT OF INTEREST

None

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