

CERVICOTOMY TO SOLVE THE DYSTOCIA IN A PROLAPSED CROSSBRED COW: A CASE REPORT

MADHU SHIVHARE*, NIDHI SINGH¹, ASHOK PATIL², NAWAL SINGH RAWAT³ and MADHURI DHURVEY

Department of Animal Reproduction Gynaecology and Obstetrics,

¹Department of Veterinary Medicine, ²Department of Animal Nutrition,

Department of Livestock Production and management, College of Veterinary Science and A.H., Mhow, NDVSU (MP)

Received: 25.08.2023, Accepted: 14.11.2023

SUMMARY

An 8 years old Cross bred cow referred from Badwani district was with the parturition prolapse having size like a volleyball brought to Veterinary clinical Service Complex, Mhow with the history of near full-term pregnancy. On clinical examination the vulvar lips was lacerated and damage due to trauma caused by suture which was applied at local level with cotton thread. Per rectal examination revealed that the fetal reflexes was very poor and palpable in pelvic cavity. The case was handled with the help of cervicotomy to release the dystocia and prolapse was treated successfully.

Keywords: Cervicotomy, Cross bred, Dystocia, Prolapse, Vulvar lips

How to cite: Shivhare, M., Singh, N., Patil, A., Rawat, N.S. and Dhurvey, M. (2024). Cervicotomy to solve the dystocia in a prolapsed crossbred cow: A case report. *Haryana Vet.* 63(SI): 154-155.

Genital prolapse is a major reproductive disorder in cattle and buffaloes (Ahmed *et al.*, 2005). It is regarded as an emergency condition and should be managed before excessive edema, mucosal trauma, contamination and fatal hemorrhage leading to grave prognosis (Anderson and Miesner, 2008). Cervico-vaginal prolapse usually involve protrusion of the portion of the floor, lateral walls and roof of vagina through vulva along with the cervix and uterus, moving caudally (Roberts, 1971). It is a common obstetrical problem which adversely affects productive and reproductive performance by affecting postpartum return to estrus, conception rate and calving interval. Many instances CVP it is associated with incomplete cervical dilatation that is leads to dystocia Prolapse is usually seen in older cows and occurs, when the tissue around the birth canal becomes relaxed during the later stages of pregnancy. The increased pressure in the abdominal cavity push the vagina or rectum out.

Vaginal prolapses typically occur before calving-usually in the heavily pregnant cow (Robert, 1986). This condition which common in primigravida, have an incidence of 11.1 to 16.7% in cows (Wehrend and Bostedt, 2003). However, Purohit *et al.* (2011) found the incidence of ICD in cattle and buffaloes to be 5.1%. It occurs because of altered endocrine milieu during parturition. The vaginal prolapse is more common and looks like a pink mass of tissue about the size of a large grapefruit or volleyball. A veterinarian should be consulted for a uterine prolapsed (Galvao, 2013) because it can be life threatening. A common cause of cervico vaginal prolapse is the pressure and weight of a large uterus in late pregnancy, Cope says.

Some heavily pregnant cows will strain when passing manure while lying down, or begin straining from the irritation of a mild prolapse.

Case history and observations

An 8 years old Cross bred cow referred from Badwani district was with the parturition prolapse having size like a volleyball brought to the Veterinary Clinical Complex, Mhow with the history of near full term pregnancy. On clinical examination the vulvar lips were lacerated and damage due to trauma caused by suture, which was applied with cotton thread. On per rectal examination revealed that the fetal reflexes was very poor and palpable in pelvic cavity and on per vaginal examination of exposed mass, found that there was very less amount of discharge from os was seen due to Os was not dilated.

Treatment and Discussion

Primarily tried for the induced the parturition with the help of injection epidosine (velathamide) 80 mg I/M but the animal fail to proper cervical dilation even up to 12 hours of epidosine injection but the slight cervical dilation with presence of water beg near the os was observed so to save the fetal life decision was taken for cervicotomy to relive the dystocia and management the prolapse mass (Manokaran *et al.*, 2014).

The animal was restrained in lateral recumbency followed by epidural anesthesia in sacro-coccygeal space with 2% lignocaine. Then, the necrosed tissue, and dung were completely cleaned from the prolapse mass with mild antiseptic (diluted potassium permanganate) solution. Before the incision 2% lignocaine was infiltrated on the decided incision line and then a longitudinal incision about

*Corresponding author: drmadhushivhare@gmail.com

12 cm was made on the external os to a portion of cervix and fetus was expelled and incised area was closed with continuous Lambert sutures and horizontal mattress using chromic catgut (No. 2). Before the end of the suture antiseptic solution of povidine iodine and Intacef Tezo 4.5 gm (Cefroxine + Sulbactum) powder was poured inside the lacerated area. After completion of suture, the mass was reduced and replaced into its normal position as per procedure explained by Roberts *et al.* (1971) and Kumbhar *et al.* (2009). To prevent the recurrence, the burners sutures was applied by using the drip set as a suture material which is non-irritant and non-traumatic (Bhattacharyya *et al.*, 2022). The sutures exerted pressure upon the sides of the vulva and kept it closed, without interfering with defecation or micturition (Craig *et al.*, 2000). Gram negative anaerobes and other facultative pathogens including Arcanobacterium pyogenes are important pathogens that cause severe uterine inflammation. Azawi *et al.* (20017) reported around 2.4% cattle with vaginal prolapse were predisposed to uterine infections. The cow was treated with 0.5% dextrose (2000 ml) i/v, Inj. Calcium borogluconate (200 ml) i/v, Cefroxine and sulbactum(Inj. Intacef Tezo 3.5gm) i/m BID for the first 3 days and SID for the next 2 days, Inj. Chlorphemaramine maleate 0.4 to 0.5 mg / kg b/w, once daily for 5 days, by IM, Inj. Melonex 0.5 mg/kg b. wt, i/m SID for 3 days with advise of oral administration of cyclomin-7 (4 boluses) once in two days. The animal showed excellent response to the treatment. Straining of the animal was gradually reduced and ceased after 96 h. The sutures was removed after completion of 5 days of treatment. The animal recovered uneventfully.

CONCLUSION

Cervico-vaginal prolapse more commonly occurs in cattle and sheep. There are a number of factors which involve in the course of parturition in a synergistic mechanism to deliver the fetus. Any deviation or alteration in any factor leads to the abnormal condition like dystocia or prolapse in peri-parturient period. In this case of

dystocia sin a prolapsed crossbred cow with near full term was reported and handle with the help of cervicotomy to release the dystocia and prolepses with quick recovery was reported and treated successfully. It was observed that the hygienic handling, proper management and treatment should deûnitely prevent further reproductive tract damage and aid in quick recovery.

REFERENCES

- Ahmed, S.I., Lodhi, L.A., Ahmad, N. and Samad, H.A. (2005). Clinical, haematological and serum macromineral contents in buffaloes with genital prolapse. *Pak. Vet. J.* **25(4)**: 167-170.
- Anderson, D.E. and Miesner M.D. (2008). Rectal prolapse. *Vety. Clinics FoodAnim.* **24**: 403-408.
- Azawi, O.L., Omran, S.N. and Hadad, J.J. (2017). Clinical, bacteriological and histopathological study of toxic puerperal metritis in Iraqi buffaloes. *J. Dairy Sci.* **90**: 4654-4660.
- Bhattacharyya, H.K., Fazili, R., Mujeeb, Buchoo, A., Bashir and Akand, H. (2022). Genital prolapse in crossbred cows: prevalence, clinical picture and management by a modified buhner's technique using infusion (drip) set tubing as asuture material. *Arch. Vet. Sci.* **82(1)**: 11-24.
- Craig, J.F. (2000). Fleming's Veterinary Obstetrics, (4th Edn.). pp. 478-484.
- Galvao, K.N. (2013). Uterine diseases in dairy cows: understanding the causes and seeking solutions. *Anim. Reprod.* **10(3)**: 228-238.
- Kumbhar, U.B., Suryawanshi A.A. and Mulani, J.B. (2009). Clinical management of post-partum eversion of uterus in Marathwadi buffalo. *Vet. World.* **2(5)**: 202.
- Manokaran Manokaran, S., Selvaraju, M., Prabakaran, V., Senthilkumar, K. Ezakial Napoleon, R. and Palanisamy, M. (2014). Per vaginal delivery of schistosmus reflexus monster fetus by cervicotomy in a cow. *Int. J. Livest. Res.* **4(5)**: 52-54.
- Purohit, G.N., Barolia, Y., Shekher, C. and Kumar, P. (2011). Maternal dystocia in cows and buffaloes: A review. *Open J. Anim. Sci.* **1**: 41-53.
- Roberts, S.J. (1971). Veterinary obstetrics and genital diseases (Theriogenology), (2nd Edn.), CBS Publishers. pp. 189-196.
- Roberts, S.J. (1986). Veterinary Obstetrics and Genital diseases, (3rd Edn.), Edward Brother, Miroghan, USA. pp. 233-240.
- Wehrend, A. and Bostedt, H. (2003). The incidence of cervical dystocia and disorders of cervical involution in the postpartum cow. *Deutsche Tierarzlithe Wochen-schrift*, **110**: 483-486.