



ISSN (E): 2277-7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2022; SP-11(7): 1945-1947  
© 2022 TPI  
[www.thepharmajournal.com](http://www.thepharmajournal.com)  
Received: 08-05-2022  
Accepted: 16-06-2022

#### Man Singh

Assistant Professor, Department of Livestock Production Management, LUVAS, Hisar, Haryana, India

#### DS Bidhan

Associate Professor, Department of Livestock Production Management, LUVAS, Hisar, Haryana, India

#### Vishal Sharma

Assistant Professor, Department of Livestock Production Management, LUVAS, Hisar, Haryana, India

#### Sandeep Dhillod

Assistant Professor, Department of Livestock Production Management, LUVAS, Hisar, Haryana, India

#### Dipin Chander Yadav

Scientist, Department of Livestock Production Management, LUVAS, Hisar, Haryana, India

#### Narender Singh

Assistant Professor, Department of Livestock Production Management, LUVAS, Hisar, Haryana, India

#### Corresponding Author

#### Man Singh

Assistant Professor, Department of Livestock Production Management, LUVAS, Hisar, Haryana, India

## Successful management of cervico-vaginal prolapse in post-partum Murrah buffalo: Case report

Man Singh, DS Bidhan, Vishal Sharma, Sandeep Dhillod, Dipin Chander Yadav and Narender Singh

### Abstract

Cervico-vaginal prolapse is most commonly observed in large ruminants. A Murrah buffalo of 8.2 years old was presented to animal health complex of buffalo farm with cervico-vaginal prolapse case. The buffalo was restrained and administered with epidural anaesthesia (2% lignocaine hydrochloride) along with application of 2% potassium permanganate in cold water to render prolapsed mass aseptic with reduced size. With the help of mild pressure, manual repositioning of prolapsed mass in pelvic cavity was done. The animal recovered with help of antibiotics and supportive treatment without any complication. This report aims at successful correction of vaginal prolapse with its management.

**Keywords:** Murrah buffalo, post-partum, cervico-vaginal prolapse, therapeutic management

### Introduction

“Murrah” breed of buffalo, native to Haryana is known as black gold. The poor reproductive performance in buffalo may be attributed to various diseases of the reproductive system, including genital prolapse (Akhtar *et al.*, 2012) [1]. Cervico-vaginal prolapsed is normally seen in late gestation (Raidurg, 2014) [23]. Occasionally, it is observed after parturition and rarely does it occur unconnected with pregnancy and parturition (Noakes, 2009) [19]. Cervico-vaginal prolapse is most commonly observed in large ruminants like cows, buffaloes and sheep. Prolapse is hanging down or plunging of a body part from its usual position. It adversely affects productive and reproductive performance by affecting postpartum return to estrus, conception rate and calving interval. The present communication highlights the successful treatment of postpartum cervico-vaginal prolapse.

### History and Clinical observations

A pluriparous recently parturated buffalo was presented with the history of cervico-vaginal prolapse at animal health complex of Buffalo farm, Lala Lajpat Rai University of Veterinary and Animal Science, Hisar. On physical examination, it was noticed that the cow was in standing position and prolapsed mass was found to be hanging with exposed vaginal wall. The prolapsed mass was swollen and edematous. Animal was showing signs of discomfort, restlessness, continuous straining, off feed and water intake, whitish mucoid cervico-vaginal discharge and intermittent prolapse of cervix was evident. Clinical examination revealed normal rectal temperature with slightly elevated heart rate.

### Therapeutic Management

After restraining animal in sternal recumbancy and administering 2% lignocaine hydrochloride (5 ml), the prolapsed mass was cleaned thoroughly with clean cold water to remove dung and dirt. The mass was further washed with (2% solution) potassium permanganate and applied soframycin ointment and xylocaine jelly. To reduce the oedema and volume of the prolapsed mass, ice pack was also applied. The repositioning of the prolapsed mass was done by initially pushing the lateral walls and middle portion followed by roof of cervix and vagina. One and a half liters of normal saline was infused into the uterus so that the prolapsed mass remains in its normal anatomical position owing to gravity. The buffalo was treated with Inj. Calcium Borogluconate i.e. Mifex @ 450ml and 5% Dextrose normal saline @ 1000ml once after complete repositioning of the prolapsed mass. Inj. Ceftriaxone @ 4.5 gm was given intramuscularly for three successive days to prevent further secondary bacterial infection. The supportive treatment was given by Inj. Meloxicam @ 0.5 mg/kg b. wt., and Inj.

Chlorpheniramine maleate @ 12ml total dose intramuscularly for 4 successive days to reduce histamine release and inflammation. Mineral mixture was recommended @ 50 g/day in concentrate ration. The buffalo started eating and drinking normally within 7hrs. The animal recovered successfully.

### Results and Discussions

Genital prolapse, including vaginal prolapse in ruminants, is considered as an emergency maternal disorder that needs immediate attention before any further complication that can lead to a poor prognosis (Yimer *et al.*, 2016) and can be life threatening (Bhattacharya *et al.*, 2007) [5]. Delay in the treatment of Cervico-vaginal prolapse might lead to necrosis and lacerations of the prolapsed mass. This case could be attributed to recent calving. Alteration of circulating estrogen hormone during last trimester of pregnancy may lead to cervico-vaginal prolapse by enhancing relaxation of sacro-sciatic ligament including other adjacent ligaments (Wolfe, 2009) [31]. Hypocalcaemia leads to fatigue of myometrial muscles, thus delays cervical involution (Murphy and Dobson, 2002). The cow was treated with slow intravenous infusion of calcium borogluconate injection. The decreased intensity of straining and expelled fetal membranes upon treatment with calcium borogluconate indicated that the prolapse might have occurred due to hypocalcaemia. Fetal membranes were expelled completely within 48 hrs of treatment. Tyagi *et al.* (2002) reported mineral imbalance as one of the cause of prolapse. So, mineral mixture was given to overcome any nutritional deficiencies that may be associated with the prolapse. One of the objectives of treatment of vaginal prolapse is to prevent recurrence (Yimer *et al.*, 2016). As it was a minor degree of recurrent prolapsed, retention sutures were not applied in the present case.

### Conclusion

In this present study, effective therapeutic management of postpartum cervico-vaginal prolapse in a buffalo was informed. Administration of supportive treatment with suitable antibiotics, analgesics and fluids to avoid secondary bacterial infection to the prolapsed mass under field conditions should be followed. Some time it may require suture and truss as per severity of the case. The cervico-vaginal prolapse case should be intervened as early as possible for better prognosis.

### References

1. Akhtar MS, Lodhi LA, Ahmad I, Qureshi ZI, Muhammad G. Serum concentrations of calcium, phosphorus and magnesium in pregnant Nili-ravi buffaloes with or without vaginal prolapse in irrigated and rain fed areas of Punjab, Pakistan. *Pak Vet J.* 2008;28(3):107-110.
2. Ahmed A, Jena B. Successful management of prepartum recurrent recto-vaginal prolapse in a cow. *Indo-Am. J Agric. & Vet. Sci.* 2015;3(1):22-24.
3. Akhil Patel, Rabindra Kumar, Verma RK, Rajesh Kumar, Chetna Gangwar. Management of Pre-Partum Recto Vaginal Prolapse in a Cow. *Int. J Curr. Microbiol. App. Sci.* 2018;7:1244-1247.
4. Bhattacharyya HK, Fazili MR, Buchoo BA, Akand AH. Genital prolapse in crossbred cows: prevalence, clinical picture and management by a modified Buhner's technique using infusion (drip) set tubing as suture material. *Vet. Arhiv.* 2012;82:11-24.
5. Bhattacharyya HK, Peer FU, Buchoo BA, Ansari MM. Management of uterine prolapse in cattle of Kashmir. *Indian Vet. J.* 2007;84:744-745.
6. Comline RS, Hall LW, Lavelle RB, Nathanielsz PW, Silver M. Parturition in the cow: endocrine changes in animals with chronically implanted catheters in the foetal and maternal circulations. *Journal of Endocrinology.* 1974;63(3):451-472.
7. Deka KC, Barua PM, Ahmed K, Dutta C, Nath M, Sarma DK. Therapeutic management of pre-partum vaginal prolapse in a jersey crossbred cow (Bostaurus). *Asian J. Sci. Tech.* 2016;7(4):2718-2719.
8. Dhillon KS, Singh BB, Kumar H, Bal MS, Singh J. Treatment of vaginal prolapse in cows and. *Vet. Rec.* 2006;158:312.
9. Dobson H, Dean PDG. Radioimmunoassay of oestrone, oestradiol-17 $\alpha$  and-17 $\beta$  in bovine plasma during the oestrous cycle and last stages of pregnancy. *Journal of Endocrinology.* 1974;61(3):479-486.
10. Ezakial NR, Sankar P, Senthilkumar G, Jayakumar K, Rishikesavan R, Ponnuswamy KKP. Modified mintchews method to control chronic cervico vaginal prolapse in a post-partum gir cow: a case report. *Res. & Rev. J Vet. Sci.* 2018;4(1):10-13.
11. Fazili MR, Bhattacharyya HK. Pros and cons of using xylazine class of drugs in veterinary practice. *Intas Polivet.* 2008;9:20-27.
12. Gurcharan S, Sidhu SS, Verma HK. Incidence of reproductive disorders of buffaloes in different zones of Punjab state. *Punjab Agri. Uni. J Res.* 2003;40:79-80.
13. Hasan T, Azizunnesa Parvez MA, Paul P, Akter S, Faruk MO, Hossain D. Correction and management of vaginal prolapse in a cow by buhner's technique. *Res. J Vet. Pract.* 2017;5(1):1-4.
14. Kapadiya PS, Chauhan PM, Nakhashi HC, Sharma VK, Sutaria TV. Recurrent post-partum uterine prolapse in a primiparous Mehsana buffalo- A case report. *J Livestock Sci.* 2015;6:109-112.
15. Kumar P. Applied Veterinary Gynaecology and Obstetrics. CBS Publishers and Distributors Pvt. Ltd. New Delhi-110002, 2015, 258-271.
16. Lakde MB, Markandeya NM, Sanap NA, Chaudhari RJ. Comparative evaluation of techniques for management of cervico- vaginal prolapse in ante-partum buffaloes. *Intas Polivet.* 2014;15:456-458.
17. Miesner MD, Anderson DE. Management of uterine and vaginal prolapse in the bovine. *Vet. Clin. Food Anim.* 2008;24:409-419.
18. Noakes ED, Parkinson TJ, England GCW. Post parturient prolapse of the uterus. *Arthur's Veterinary Reproduction and Obstetrics.* 8th ed. Harcourt (India) Pvt. Ltd., New Delhi. 2001;19:333-338.
19. Noakes ED, Parkinson TJ, England GCW. *Veterinary Reproduction and Obstetrics.* 9th edn. W.B Saunders Company, Philadelphia, 2009, 146-153, 306-318.
20. Pandit RK, Gupta SK, Pattabiraman SR. A clinical study of vagina and uterus in buffaloes. *Indian Vet J.* 1982;59:975-980.
21. Patil AD, Narwade PS, Raghuwanshi DS. Management of prepartum cervico-vaginal prolapse in 37 dairy animals. *Intas Polivet.* 2014;15(2):459-460.
22. Patra BK, Nahak AK, Dash SK, Sahu SS, Das SP, Das S, *et al.* Cervico Vaginal Prolapse in a Pregnant Cow and Its Management - A Case Report. *Int. J Livestock Res.*

- 2014;4(5):55-59.
23. Raidurg R. Surgical management of cervicovaginal prolapse in a Hallikar cow. *Intas Polivet*, 2014;15(2):470-471.
  24. Rajesh Kumar, Yadav DK, Yadav VK, Jaisawal S, Srivastava S, Gautam S. Recto-cervico-vaginal prolapse in non-descript postpartum buffalo and its clinical management. *Bull. Env. Pharmacol. Life Sci.* 2018;7(2):46-50.
  25. Roberts SJ. Injuries and diseases of the puerperal period. In: *Veterinary Obstetrics and Genital Diseases (Theriogenology)*. 2nd ed. [Indian reprint]. CBS Publishers and Distributors, New Delhi, India, 2004, 300-335.
  26. Sharma DK, Das A, Nath N. Management of pre-partum vaginal prolapse in a crossbred cow with rope truss method. *Int. J Curr. Microbiol. App. Sci.* 2017;6(11):1067-1070.
  27. Sharma A, Sharma A, Singh M, Kumar P, Saini P, Thakur A, *et al.* Successful management of cervico-vaginal prolapse in a Murrah buffalo - a case report. *Explor Anim Med Res.* 2017;7(2):225-226.
  28. Veeraiah G, Srinivas M. Spontaneous extrusion of the intestines and uterus as a sequelae to vaginal prolapse in a buffalo heifer: A case report. *Buffalo Bull*, 2010, 29(1).
  29. Wachida N, Kisani AI. Uterine prolapse in a doe goat: a case report. *Int. J Anim. Vet. Adv.* 2011;3(3):135-137.
  30. Whittier WD. Prolapse in cattle- an ugly fact of life. *Livestock update*, Virginia State University, 2007.
  31. Wolfe DF. Medical and Surgical Management of Vaginal Prolapse in Cattle. Presentation 81st western veterinary conference, Auburn, 2009 Feb.