



ISSN (E): 2277- 7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2021; SP-10(3): 220-221  
© 2021 TPI  
[www.thepharmajournal.com](http://www.thepharmajournal.com)  
Received: 09-01-2021  
Accepted: 16-02-2021

**Man Singh**  
Assistant 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

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

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

**Dipin Chand Yadav**  
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 pre-partum Murrah buffalo: Case report

**Man Singh, Vishal Sharma, Sandeep Dhillod, Narender Singh, Subhasish Sahu and Dipin Chand Yadav**

### Abstract

Buffaloes are different in many ways as compared to other cattle in health aspect. Pre-partum vaginal prolapse is one of the main reproductive disorders in buffaloes. A Murrah buffalo of 7.4 years old in last month of its pregnancy was presented at Government Veterinary Hospital, Munak, Karnal, Haryana with cervico-vaginal prolapse case. The physical examination of the prolapsed mass revealed a stained, congested and abraded vaginal mucous membrane. The buffalo was restrained and epidural anaesthesia (2% lignocaine hydrochloride) was administered and 2% potassium permanganate in cold water applied for making prolapsed mass aseptic and reduced in size and manual repositioning done with little pressure in pelvic cavity. The buffalo given antibiotic, anti-inflammatory, anti-histamine and calcium supplementation besides fluid therapy for four days. The buffalo was normal on day fifth with no complication. The aim of the report is to show effective correction of vaginal prolapse with its management by rapid diagnosis and fast action.

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

### Introduction

Haryana state is famous for “Murrah” breed of buffalo. The reproductive performance in buffalo is poor due to various diseases of the reproductive system, including genital prolapse (Akhtar *et al.*, 2012). Prepartum vaginal prolapse is one of the major reproductive ailments in buffaloes (Azawi, 2010) [3]. Prolapse is dwindling down or plunging of a body part from its usual position. Prolapse of cervix and vagina is common obstetrical problem which adversely affects productive and reproductive performance by affecting postpartum return to estrus, conception rate and calving interval. Maternal plasma shows corresponding increases in estrogens just before calving (Dobson and Dean, 1974; Comline *et al.*, 1974) [6, 5], while the levels of androgens which are the precursors to estrogen, remain relatively constant. The present case highlights the effective treatment of postpartum cervico-vaginal prolapse.

### History and Clinical observations

A pluriparous advanced pregnant 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 found that buffalo was lying in sternal recumbency and the prolapsed mass was hanging through the vulva and resting on the ground. After clinical check-up; animal was apparently healthy, temperature, respiration and pulse was within normal range. After examination, the prolapsed mass was found swollen, oedematous and mild laceration in the exposed part. Cervical seal was intact. The buffalo could not pass urine due to prepartum prolapse and at frequent intervals exhibited intermittent straining.

### Therapeutic Management

The animal was controlled on sternal recumbency, caudal epidural block induced with 5ml lignocaine hydrochloride. The prolapsed mass was washed thoroughly with cold water to remove filth. The mass was further washed with (2% solution) potassium permanganate and applied soframycin ointment and xylocaine jelly then the prolapsed mass was lifted above to drain out urine and placed to its normal anatomical position with gentle thrust and meticulous pressure with half closed hand. After complete repositioning of the prolapsed mass, the buffalo was treated with fluid therapy viz. inj. Mifex @ 450ml, inj. for 1 day and 5% Dextrose normal saline @ 1000ml once.

Inj. Ceftriaxone @ 4.5 gm was given intramuscularly for four successive days to prevent further secondary bacterial infection. The supportive treatment was given by Inj. Meloxicam+paracetamol@ 0.5 mg/kg b. wt., and Inj.

Chlorphenaramine maleate@ 12ml total dose intramuscularly for 4 successive days to reduce histamine release and inflammation. The buffalo started eating and drinking normally within 7hrs. The animal recovered successfully.



**Fig 1:** Shows in Cervico-vaginal prolapse in pre-partum Murrah buffalo

### Results and Discussions

A prolapse can be life threatening, however, if the cow is not treated early because of septicemic condition (Bhattacharya *et al.*, 2007) [4]. Prolapse is mainly strike pluriperous as compared to heifer (Hasan *et al.*, 2017) [7]. Our finding is resemblance with earlier report where the maximum number of such cases was noticed in the last trimester of gestation (Noakes *et al.*, 2001) [8]. 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). Epidural anaesthesia is mandatory before handling of prolapse mass as it leads to tenesmus. In such case, caudal epidural block using lignocaine hydrochloride (2%) provides proper regional analgesia which prevents straining. Protruding organs being easily repositioned by use of epidural anaesthesia (Noakes *et al.*, 2009) [9]. The extruded mass was washed with normal saline and repositioned back into the abdominal cavity under epidural anaesthesia and Postoperative care included administering antibiotics, antihistaminics, antispasmodics, mineral supplementation for 4 days and the animal was managed on epidural anaesthesia to minimize abdominal straining along with other managemental practices (Veeraiah, 2010) [12].

### Conclusion

In this Present study, effective therapeutic management of prepartum 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 must be attended as soon as possible for great 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. Akhtar MS, Lodhi LA, Ahmad I, Qureshi ZI, Muhammad G. Incidence of Pre-Partum Vaginal Prolapse in Nili-Ravi Buffalo Under Two Different Agro-Ecological Zones of Punjab, Pakistan. *Revista Veterinaria* 2010;21(1).
3. Azawi OI. Uterine infection in buffalo cows: a review. *Buffalo Bull.* 2010;29:154-171.
4. Bhattacharyya HK, Peer FU, Buchoo BA, Ansari MM. Management of uterine prolapse in cattle of Kashmir. *Indian Vet. J* 2007;84:744-745.
5. 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):451-72.
6. Dobson H, Dean PD. 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):479-86.
7. 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.
8. 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.
9. Noakes ED, Parkinson TJ, England GCW. *Veterinary Reproduction and Obstetrics.* 9th edn. W.B Saunders Company, Philadelphia 2009;146-153:306-318.
10. Parikh SS, Makwana RB, Savaliya BD, Patbandha TK, Kumar R. Pre-Partum Cervico-Vaginal prolapse in a gir cow.
11. Kumar R, 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.
12. 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).