

# Case report

## Clinical Management of Postpartum Cervico-Vaginal Prolapse In Graded Murrah Buffalo: A Case Report

### ABSTRACT

The present case report describes the postpartum cervico-vaginal prolapse and its clinical management in a graded Murrah buffalo with the history of parturition a day ago, presented to the Veterinary Clinical Complex, Korutla. The prolapsed mass was having lacerations, mild straining and bleeding. After thorough cleaning and reduction of edema, the prolapsed mass was properly repositioned. A rope truss was applied to prevent reoccurrence of prolapse. The animal showed a good response to manual correction and no complications were observed. Early diagnosis and timely intervention will help in effective management of postpartum cervico-vaginal prolapse in a buffalo.

*Keywords: Graded murrah buffalo, Post partum, Cervico-vaginal prolapse, Rope truss method.*

### 1. INTRODUCTION

Buffaloes are very important in the Indian dairy industry as they contribute 44.81% of total milk production [1]. Various health and reproductive issues will show a direct effect on its milk yield. Prolapse of genitalia is one of the major reproductive disorders, seen in advanced gestation or postpartum conditions [2]. In cervico-vaginal condition cervix and vagina protrudes out of the vulvar lips [3]. During the third trimester, increased estrogen hormone levels lead to relaxation of pelvic ligaments, vulval sphincter muscles and vulva. Hypocalcaemia may cause decreased uterine tonicity. Both the conditions will predispose the cervico-vaginal prolapse [4]. Early finding and proper treatment are requirements in cervico-vaginal prolapse in buffaloes to save its health and breeding life [5]. The present case report describes the

condition of cervico-vaginal prolapse in Murrah buffalo and its management.

### 2. CASE HISTORY AND OBSERVATION

A 3 years old graded Murrah buffalo was presented to Veterinary Clinical Complex, College of veterinary science, Korutla with the history of cervico-vaginal prolapse 6 hours after the normal calving (fig.1). Initial attempts to replace the prolapse mass were performed by owners at the farm level. Feed and water intake were reduced with ceased urination. Animal was restless with a rectal temperature of 101.3°F and pale conjunctival mucous membrane. On clinical observation edematous, swollen prolapsed mass with severe straining.

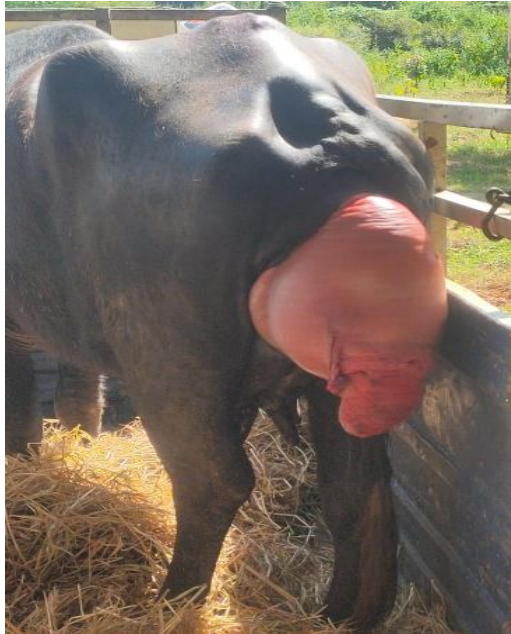


Fig 2. Lifting the prolapsed mass and relieving the retained urine



Fig 1. post-partum cervico-vaginal prolapse in buffalo

## 2.1 Treatment

Animal was secured in trevis for proper restraining. Fresh cool **was** water used to clean and remove dung, blood clots and soiled material from the prolapsed mass followed by potassium permanganate solution (1:1000) to prevent further infection. Injection Texableed 8ml (Tranexamic Acid 800mg) I/M **was** given intramuscularly and epidural anaesthesia was performed by injecting 5ml of 2% lignocaine hydrochloride solution into the sacrococcygeal space. Both topical sugar application and popin spray used to reduce the edema.

Prolapsed mass was lifted in upward direction to remove retained urine (fig.2). By lubricating enough with liquid paraffin, the prolapsed mass slowly pushed into the pelvic cavity using fist. **Cervix and vagina was repositioned as explained by Kumbhar et al 2009 and retained by rope truss (fig.3,4) [6].** The animal was treated with Inj. D25 1000 ml (25% dextrose) I/V, Inj. RL 1000 ml I/V, Inj. Melonex 12 ml (Meloxicam 60mg) I/M, Inj. Moxel 3gm (Amoxicillin: 2 gm & Cloxacillin: 1 gm) I/M, Inj. Dexona 5 ml (Dexamethasone sodium: 22mg) I/M, Inj. Zeet 10 ml (Chlorpheniramine maleate: 100mg) I/M.

Cervico-vaginal prolapse is a common reproductive disorder in the late gestation and post-partum ruminants and can be noticed by protrusion and eversion of vaginal wall and cervix through vulva [7]. There are many factors which leads to the genital prolapse through vulva. The primary cause of prolapse is thought to be the hormonal changes seen in last trimester and parturition, particularly estrogen, which makes relaxation of the pelvic ligaments and surrounding soft tissue structures [8]. Serum macro-mineral deficiency mainly calcium and phosphorus are also considered as predisposing cause of vaginal prolapse [9]. Avoiding higher intra-abdominal pressure including tympany, excessive estrogen content in the feed will **decrease** the occurrence of vaginal prolapse to greater extent [10].

Genital prolapses are considered as obstetrical emergencies which require early intervention [11]. Delay in **treatment may lead to** dystocia in prepartum conditions [12]. After manual reduction, ropetruss method showed effective retention method [13]. Postoperative treatment for cervicovaginal prolapse can be done by allopathy (antibiotics, non-steroidal anti-inflammatory drugs), homoeopathic formulation (prolapse cure) or in their combination [14].

## 3. DISCUSSION



Fig. 3. Rope truss applied – Lateral view.

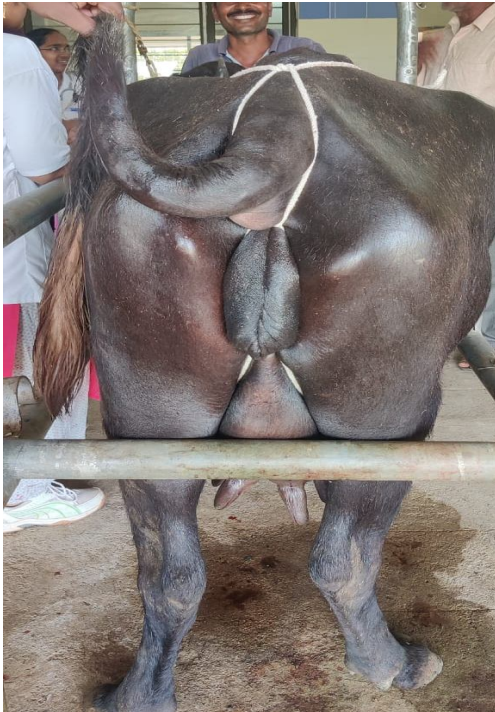


Fig. 4. Rope truss applied – rare view.

#### 4. CONCLUSION

Animal with cervico-vaginal prolapse, if corrected and properly treated, may conceive successfully and deliver live calves in the future. Early diagnosis and timely intervention will help in effective management of postpartum cervico-vaginal prolapse in a buffalo.

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**REFERENCES**

1. Department of animal husbandry and dairying. Annual report 2023-2024.2024;6.[https://dahd.nic.in/hi/document/annual\\_report](https://dahd.nic.in/hi/document/annual_report).
2. Markandeya NM. Postpartum complications in buffaloes-A review. *IntasPolivet*. 2014;15(2):376-92.
3. Kumar S, Kumar B, Biswas N, Warghat C, Ghosh SK. Clinical management of pre-partum cervico-vaginal prolapse in an advanced pregnant Murrah buffalo. *Int J Vet Sci Anim Husb*. 2024; 9(5): 89-91.
4. Roberts SJ. *Veterinary obstetrics and genital diseases*. 2nd ed. CBS Publishers & Distributors Pvt. Limited; 2004.
5. Sah SK, Nakao T. Some characteristics of vaginal prolapse in Nepali buffaloes. *J Vet Med Sci*. 2003;65(11):1213-1215.
6. KumbharUB, Suryawanshi AA, Mulani JB, Raghuwanshi DS. Clinical management of post-partum eversion of uterus in Marathwadi buffalo. *Vet World*. 2009;2(5):202.
7. ArthurGH, England GC, Noakes DE, Parkinson TJ. *Arthur's Veterinary Reproduction and Obstetrics*. 8th ed:(theriogenology). Harcourt (India); 2001.
8. Thota C, Gangula PR, Dong YL, Yallampalli C. Changes in the expression of calcitonin receptor-like receptor, receptor activity-modifying protein (RAMP) 1, RAMP2, and RAMP3 in rat uterus during pregnancy, labor, and by steroid hormone treatments. *BiolReprod*. 2003;69(4):1432-1437.
9. 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).
10. Kumar AS, Yasotha A. Correction and management of total uterine prolapse in a crossbred cow. *Journal of Agriculture and Veterinary Science*. 2015;8(1):14-16.
11. Akambaram S, Gupta C. Genital Prolapse and Its Management in Cows. *Periparturient Diseases of Cattle*. 2024 Aug 6:277-86.
12. Maheswari S, Ravikumar K, Sathishkumar S, Sureshkumar R, Monica G, Umamageswari J, Varma DD. Obstetrical management of dystocia due to prepartum cervico vaginal prolapse in a jersey cross-bred cow by cervicotomy–A case report. *Int J Vet Sci Anim Husb*. 2024; 9(4): 44-46
13. Selvaraju M, Prakash S, Varudharajan V, Periyannan M, Ravikumar K, Palanisamy M. Modified vulval truss technique to prevent recurrence of cervico-vaginal prolapse in water buffaloes. *Buffalo Bulletin*. 2023 Jun 30;42(2):133-41.
14. Patel MK, Parsani HR, Chandel BS. Therapeutic management of pre and post-partum vagino-cervical prolapse in bovine by homoeopathic formulation "Prolapse Cure". *Int J Vet Sci Anim Husb*.2024; SP-9(2): 402-405

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