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

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Case Report

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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 (Annual Report, 2024). 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 (Markandeya, 2014). In cervico-vaginal condition cervix and vagina protrudes out of the vulvar lips (Kumar et al., 2024).

During the third trimester, increased estrogen hormonal levels lead to relaxation of pelvic ligaments, vulval sphincter muscles and vulva. Hypocalcaemia may cause decreased uterine tonocity. Both the conditions will predispose the cervico-vaginal prolapse (Roberts, 2004). Early finding and proper treatment are requirements in cervico-vaginal prolapse in buffaloes to save its health and breeding life (Sah and Nakao, 2003). 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^{o}F and pale conjunctival mucous membrane. On clinical observation edematous, swollen prolapsed mass with severe straining.

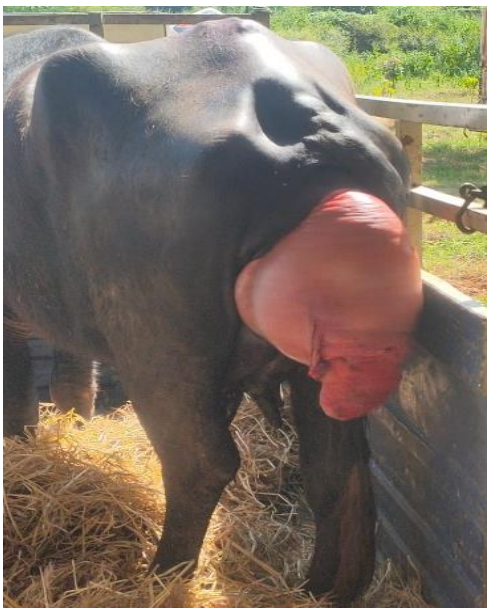

Fig. 1. post-partum cervico-vaginal prolapse in buffalo

Fig. 2. Lifting the prolapsed mass for repositioning

Fig. 3. Rope truss applied – Lateral view

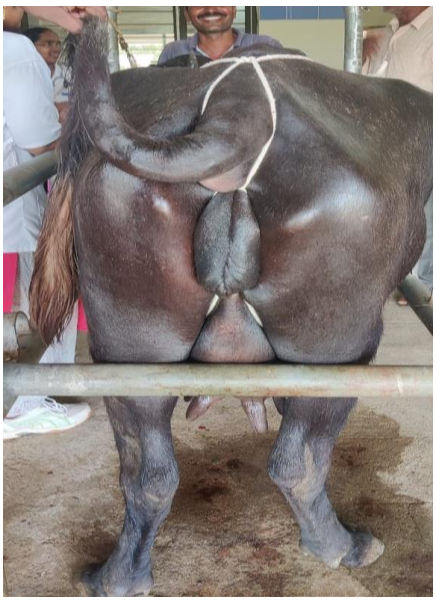

Fig. 4. Rope truss applied – rear view

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 (Figs. 3 and 4) (Kumbhar et al., 2009). 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.

3. DISCUSSION

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 (Arthur, 2001). 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 (Thota, 2003). Serum macro-mineral deficiency mainly calcium and phosphorus are also considered as predisposing cause of vaginal prolapse (Akhtar et al., 2008). Avoiding higher intra-abdominal pressure including tympany, excessive estrogen content in the feed will decrease the occurrence of vaginal prolapse to greater extent (Kumar and Yasotha, 2015).

Genital prolapses are considered as obstetrical emergencies which require early intervention (Akambaram, 2024). Delay in treatment may lead to dystocia in prepartum conditions (Maheswari et al., 2024). After manual reduction, rope truss method showed effective retention method (Selvaraju, 2023). Postoperative treatment for cervicovaginal prolapse can be done by allopathy (antibiotics, non-steroidal anti-inflammatory drugs), homoeopathic formulation (prolapse cure) or in their combination (Patel et al., 2024).

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.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Authors hereby declare that NO generative AI technologies like Large language models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript. The written manuscript and images are real and not generated by AI.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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