Short Communication

DOI: 10.48165/ijar.2022.43.2.17

The Indian Journal of Animal Reproduction

The official journal of the Indian Society for Study of Animal Reproduction

Year 2022, Volume-43, Issue-2 (Dec)

ACS Publisher
www.acspublisher.com

ISSN 0970-2997 ***(Print)***

ISSN 2583-7583 ***(Online)***

Management of Pre-Partum Cervico-Vaginal Prolapse in a Murrah Buffalo

Sanjeev Kumar Verma[1], Rajesh Kumar[1*], Sonu Jaiswal[2], Abhishek Kumar Verma[1], Sushant Sakhahari Daund[1]

[1]Department of Veterinary Gynaecology and Obstetrics
[2]Veterinary Clinical Complex
College of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya, UP, India.

ABSTRACT

A 9 months pregnant Murrah buffalo with cervico-vaginal prolapse was presented and it was treated by epidural anaesthesia along with rope truss technique followed by administration of Ceftiofur sodium @ 2.2mg/kg IM for 5 days to prevent secondary infection and herbal remedies arjun bark and hadjod. The case was recovered uneventfully.

Key words: Cervico-vaginal prolapse, Herbal remedies, Murrah, buffalo.

How to cite: Verma, S.K., Kumar, R., Jaiswal, S., Verma, A.K., & Daund, S.S. (2022). Management of Pre-Partum Cervico-Vaginal Prolapse in a Murrah Buffalo.
The Indian Journal of Animal Reproduction, 43(2), 74–76. 10.48165/ijar.2022.43.2.17

INTRODUCTION

Eversion and prolapse of vagina and cervix can occur in all domestic animals but is frequently encountered in ruminants (Aiellon and Moses, 2016). In bovines, vaginal prolapse mostly happens in last 2-3 month of gestation (Roberts, 1971), but in majority of cases during last two weeks of gestation (Sloss and Dufty, 1980). It can also be seen during postpartum period (Roberts, 1971), at oestrus (Youngquist, 1997) and post-oestrus period (Yotov et al., 2013) in non-pregnant cows. In acute cases, irritation of vagina causes tenesmus and secondary prolapse of the rectum (Kumar et al., 2018). The cause of this condition is unclear (Noakes et al., 2019) but incompetence of the constrictor vestibule and constrictor vulvae muscles can lead to vaginal prolapse (Morrow, 1986). Genetic predisposition and placental estrogen leading to relaxed pelvic ligaments, perineum, adjacent structures and edema and relaxation of vulva and vulvar sphincter muscles predispose to prolapse. Occasionally, vaginal prolapse is associated with the cystic ovaries (excessive estrogen production (Roberts, 1971). Vaginal prolapse may be attributed to deficiency of certain macro or micromineral in general, calcium and phosphorus in particular (Akhtar et al., 2008;

*Corresponding author.
E-mail address: drrajeshvgo@nduat.com (Rajesh Kumar)
Received 25-03-2023; Accepted 01-06-2023

Kumar, 2015 and Hasan et al., 2017). In addition to atony of skeletal and smooth muscle and other physiologic effect of hypocalcemia are ruminal stasis and secondary bloat, constipation, relaxation of anus and loss of anal reflex as well as fully dilated cervix and normal presentation of fetus (Radostits et al., 2009). Many techniques and therapies have been tried and tested to manage cervico-vaginal prolapse (Kumar, 2015; Dhillon et al., 2006). The present is reported as a successful management of recurrent pre-partum vaginal prolapse in a crossbred dairy buffalo using rope truss technique.

CASE HISTORY AND OBSERVATIONS

A 6 year old normal buffalo about 9 month of gestation of a private dairy farm was reported with the history of recurrent vaginal prolapse since 2 months (Fig 1). Owner stated that the problem was intermittent with the protrusion of the vagina between the outer labia when the animal was lying down. Over time, vagina l prolapse worsened and the prolapsus remain outside of vulva even when animal is standing. Furthermore, the buffaloes show discomfort during urination. The buffalo had been unsuccessfully treated with Calcium Borogluconate, antibiotics, and progesterone injections with shoelace vulvar suture several times over the past two months. The owner also reported that the degree of vaginal protrusion increased with increased movement of the buffalo as the pregnancy progressed. The clinical examination revealed swollen, oedematous and congested vaginal mucosa with several lacerations. The recorded rectal temperature was 102.9°F. On the basis of history and clinical observations, the case was diagnosed as cervico-vaginal prolapse and decided to manage using rope-truss technique and medication.

TREATMENT AND DISCUSSION

Buffalo was restrained under low caudal epidural anaesthesia 2% Lignocaine HCl, 5 ml (Lox viscous 2%), the prolapsed mass was washed with potassium permanganate solution (1:1000) and lacerated wounds were dressed with Betadine ointment (10% Povidone Iodine). The increased levels of oestrogen during the last 2-3 months of pregnancy might have caused relaxation of the pelvic ligaments and adjoining structures (Kumar *et al*., 2009). The prolapse mass was then manually repositioned by gently pressing with a fist and while simultaneously lifting it with the palm of the other hand. Prevention of recurrence was achieved by applying the rope truss technique according to the standard procedure using ropes with a diameter of 3mm. The animal was treated with Ceftiofur sodium (X yrofur, Intas) for 5 days @ 2.2 mg IM, and owner was advised to feed locally available plant like Hadjod and bark of Arjun for one month. Like present observation, earlier studies also suggested favourable response of calcium and phosphorus therapy in management of cervicovaginal prolapse cases, moreover, deficiency of the same also suggested as a cause of vaginal prolapse (Kumar, 2015; Hasan *et al.,* 2017; Kumar *et al.,* 2020). The rope truss was allowed to stay till initiation of parturition and it will remove during parturition. Rope truss is very effective, safe, non-invasive and easy method for retention of ante-partum cervico-vaginal prolapse as per Lakde *et al.* (2014).

Depending on severity and extent of damage three methods may be use to manage vaginal prolapse in bovines namely conservative methods, suturing methods or truss (Parikh *et al*., 2018) and surgical techniques (Caslick's operation, Farquarson's operation and Winkler's operation) are use to manage vaginal prolapse (Jackson, 2004). Furthermore, they observed neither any complications nor difficulties at parturition after application of this technique.

CONCLUSIONS

Thus, it can be inferred that vaginal rope truss technique along with therapeutic management can be used to manage cervico-vaginal prolapse under field conditions. Furthermore, to manage the case successfully on economic and welfare ground early diagnosis and adoption of appropriate corrective measures are important.

CONFLICT OF INTEREST

No conflict of interest to declare.

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