P-ISSN: 2618-0723
E-ISSN: 2618-0731

NAAS Rating: 5.04
www.extensionjournal.com

International Journal of Agriculture Extension and Social Development

Volume 8; SP-Issue 5; May 2025; Page No. 93-95

Received: 02-03-2025
Accepted: 03-04-2025

Indexed Journal
Peer Reviewed Journal

Utilization of *Argyreia speciosa* seeds in the clinical management of Recto-cervico-vaginal prolapse in Murrah Buffalo

Abhay Kumar Meena, Chandra Shekher Saraswat, Sumit Prakash Yadav, Pradeep Kumar Manchiwal and Krishna Nand Bansal

Department of Veterinary Gynaecology and Obstetrics, Post-Graduate Institute of Veterinary Education and Research, Jaipur, Rajasthan, India

DOI: https://doi.org/10.33545/26180723.2025.v8.i5Sb.1981

Corresponding Author: Abhay Kumar Meena

Abstract

An eight year old Murrah postpartum buffalo was presented at TVCC, PGIVER, Jaipur with a history of parturition occurring 20 days prior. The animal exhibited a temperature of 103.4° F. An elongated, cylindrical mass protrude through the anal orifice and protrusion of cervix and vagina from vulva. Thus, the case is diagnosed as recto-cervico-vaginal prolapse. To alleviate straining, epidural anesthesia was administered (Lignocaine hydrochloride 2%, 10 ml) in the sacro-coccygeal space. The prolapsed mass was cleansed with a potassium permanganate solution (1:1000), and all debris and necrotic tissue were removed. An ice pack was applied, followed by the use of POP IN spray (150 ml, Natural remedies) and A-3 spray (100 ml, containing Sucralfate, Metronidazole, and Povidone Iodine) on the mass, which was then repositioned to its anatomical locations. A canvas and rope truss were applied to the anal orifice and vulvar lips to prevent further protrusion. Seeds of *Argyreia speciosa* (Family Convolvulaceae), commonly known as Samundar soak (Vriddadaru in Sanskrit), were crushed (250 gm divided into four doses of 62.5 gm) with water to form a paste, which was administered orally daily with 250 gm of wheat flour for four days. Inj. Melonex 20 ml, im; inj. Chlor pheniramine maleate 10 ml im, inj. Ceftriaxone 3 g, im given. Oral herbal ecbolic (Liquid. Utrevive Virbac) was administered 200 mL/day for five days. The buffalo had an uneventful recovery, and no further recurrence was reported.

Keywords: Buffalo, recto-cervical-vaginal prolapse, epidural anaesthesia, Samundar soak

Introduction

Clinical evaluations have shown that genital prolapse is the 3rd or 4th [1, 2] most common disorder affecting reproduction in the buffalo. The eversion of the genital tract (prolapse) located in the pelvis occurs as a protrusion through the external genitals (vulva) and has been reported as case reports in buffaloes as early as 1967 [3, 4]. Vaginal prolapse commonly occurs during gestation [5-8] and the postpartum period [9-11], sometimes in non-pregnant buffaloes [12] and rarely during estrus [13] whereas uterine prolapse occurs during the postpartum period [14-16]. The basic cause of prolapse appears to be weakening or relaxation of the constrictor vestibuli muscle and atony of the vaginal musculature [17]. The etiology of the prolapse continues to be poorly understood although increasing levels of plasma estradiol during gestation [18-20] and low levels of circulating trace elements such as copper, selenium and zinc and minerals such as calcium and phosphorous [21-24] are some of the postulated contributing factors.

Based on the severity and the parts of the reproductive system involved, the prolapse can be classified under three categories *viz* first, second and third. In the first degree prolapse the mass is small and extends only up to the lips of the vulva. It is more evident when the animal is resting. In the second degree prolapse, vaginal floor protrudes out of the vulva. The third degree is the most extensive form of uterine prolapse where there is complete protrusion of vagina exposing the cervix. Lack of education limits intervention from animal owners in assisting the animal or in providing the basic first aid. The current report highlights the management of third degree post parturient complete prolapse of uterus in a non-descript buffalo [25]. Feeding of seeds of *Argyreia speciosa* have been reported to be 100% curative in preventing recurrent prolapse in buffaloes [26], however, the trial was on an extremely small number of buffaloes.

Case history and clinical observations

An eight year old Murrah post-partum buffalo was presented at TVCC, PGIVER, Jaipur. With a history of parturition occurring 20 days prior. The animal exhibited a temperature of 103.4° F. An elongated, cylindrical mass protrude through the anal orifice and protrusion of cervix and vagina from vulva. A baseball-sized soiled, oedematous vaginal part and a coconut-sized rectal mass were clinically found to be prolapsed. Since last 12 hours the buffalo was not defecate and urinate. Thus, the case is diagnosed as recto-cervico-vaginal prolapse.

Clinical management

On palpation, the consistency of protruded mass through vulva is suggestive that bladder might be Involve. On elevating the prolapse mass with both hand, with the help of catheter, urine starts draining until bladder empetied to

reduce the pressure of prolapse mass. The animal was secured in a trevis for achieving caudal epidural anesthesia by injecting 5 ml 2% lignocaine hydrochloride solution into sacro coccygeal space. The prolapsed masses are washed with potassium permanganate solution (1:1000) removing debris. The ice packs were applied for 20 minutes after which shrinkage of the prolapsed mass was evident to naked eyes. By applying liquid paraffin which acts as lubricant, under epidural anesthesia the prolapsed mass of rectum is pushed into the anus by using fist. In the same way the vaginal mass is repositioned by using fist retained by using rope truss method. To arrest the bleeding hemostat inj. Carbazochrome Salicylate 5 ml was administered intramuscularly. Use of POP IN spray (150 ml, Natural remedies) and A-3 spray (100 ml, containing Sucralfate, Metronidazole, and Povidone Iodine) on the mass, which was then repositioned to its anatomical locations. A canvas and rope truss were applied to the anal orifice and vulvar lips to prevent further protrusion. Seeds of *Argyreia speciosa* (Family Convolvulaceae), commonly known as Samundar soak (Vriddadaru in Sanskrit), were crushed (250 gm divided into four doses of 62.5 gm) with water to form a paste, which was administered orally daily with 250 gm of wheat flour for four days. Inj. Melonex 20 ml, im ; inj. Chlor pheniramine maleate 10 ml im, inj. Ceftriaxone 3 g, im given. Oral herbal ecbolic (Liquid. Utrevive Virbac) was administered 200 mL/day for five days. Care full observation was done for 5 days for any further recurrence of prolapse of the masses. The Rope truss was removed after 5 days. No further reoccurrence of prolapse is noticed in the animal.

Fig 1: Prolapsed recto vaginal mass

Fig 2: After ice packs application for 20 minutes recto vaginal prolapsed mass

Fig 3: Drain the urine from bladder

Fig 4: Retention of prolapsed mass by rope truss method

Fig 5: Seeds of *Argyreia speciosa (*Samundar soak)

Results and Discussion

The buffalo had an uneventful recovery, and no further recurrence was reported. The patient was kept on easily digestible green fodder. Rectal prolapse may result from prolonged tenesmus or increased intra-abdominal pressure due to bloat, proctitis, diarrhorea, act of parturition and constipation. Lignocaine hydrochloride 2% epidural was used by Singh and Jain [27] however similar anesthesia was used in present study. Likewise the rope truss is applied in order to exert pressure on the sides of the vulva to prevent recurrence of prolapse and simultaneous use of antibiotics helped in retention of prolapse and removal of possible infection from the prolapsed mass [28, 29, 30] also successfully managed the genital prolapse in buffaloes by using rope truss method. Dhillon and Singh [31], after screening several indigenous drugs, found seeds of *Argyreia speciosa* (Family Convolvulacae), locally known as 'Samundar soak' (Vriddadaru in Sanskrit) to be an effective remedy for this problem. The study reported here was carried out to

evaluate the efficacy of seeds of *Argyreia speciosa* in the treatment of vaginal prolapse in cows and buffaloes.

Conclusion

The present case communicates successful management of cervico vaginal prolapse associated with rectal prolapse in Murrah buffalo by manual pressure along with seeds of *Argyreia speciosa (*Samundar soak)) to be an effective remedy for this problem.

References

1. Atwal KS, Prabhakar S, Ghuman SPS. Prevalence of various reproductive disorders in buffaloes in seleniferous areas of Punjab. Indian J Anim Reprod. 2002;23(2):187-8.
2. Fareed SK, Memon KH, Kachival AB. Prevalence and economic losses due to reproductive disorders and mastitis in buffaloes at Karachi, Pakistan. Indian J Anim Res. 2017;51:1130-3.
3. Chauhan RAS, Mittal VP, Kandu PB. Postpartum prolapse of vagina in a she-buffalo. Indian Vet J. 1967;44:717-8.
4. Hattangady SR, Deshpande KS. Case reports on "through and through" stay suture technique for retention of vaginal prolapse. Indian Vet J. 1967;44:528-30.
5. Nanda AS, Sharma RD. Incidence and etiology of prepartum prolapse of vagina in buffaloes. Indian J Dairy Sci. 1982;35:168-71.
6. Mishra UK, Agrawal RG, Pandit RK. Incidence of prolapse of genitalia in Murrah buffaloes in relation to season, pregnancy, parity and management. Indian Vet J. 1998;75:254-5.
7. Purohit GN. Postpartum complications in large animals. In: Purohit GN, editor. Domestic Animal Obstetrics. Germany: Lambert Academic Publishers; 2012. p. 551-603.
8. Purohit GN. Maternal complications of gestation in the buffalo: Etiology, antenatal diagnosis and management. In: Purohit GN, editor. Bubaline Theriogenology. Ithaca (NY): International Veterinary Information Service; 2013. Doc No. A5713.0113. https://www.ivis.org/advances/purohit/chap13/chapter.asp
9. Sheth AR. Some observations about incidence of prolapse of vagina in Surti buffaloes. Indian Vet J. 1970;47:1130-4.
10. Tiwana MS, Bhalaru SS, Dhillon JS, *et al*. Genetic and non-genetic factors affecting utero-vaginal prolapse in buffaloes. Indian J Dairy Sci. 1984;37:11-5.
11. Verma SK, Sharma SK, Gupta RC, *et al*. Vaginal prolapse in buffalo: A review. Philipp J Vet Med. 1979;18(2):131-40.
12. Mishra UK, Agrawal RG, Pandit RK. Clinical study on prolapse of genitalia in Murrah buffaloes. Indian J Anim Reprod. 1997;18(2):124-6.
13. Krishna KM, Dharani S, Prabhakar K. Estrual prolapse and its clinical management in bovines: A report of three cases. Intas Polivet. 2012;13:31-3.
14. Pandit RK, Gupta SK, Pattabiraman SR. A clinical study on prolapse of vagina and uterus in buffaloes. Indian Vet J. 1982;59:975-80.
15. Khamees HA, Alfars AA, Fahad TA. The relationship between the postpartum uterine prolapse incidence and some macro minerals serum level deficiency in buffalo cow in Basrah province. Al-Qadisiya J Vet Med Sci. 2014;13:94-7.
16. Medina NP, Torres E, Landicho E. Uterine prolapse in Bulgarian Murrah buffaloes (*Bubalus bubalis* L) and its association with post-parturient serum calcium level and other related risk factors. Philipp J Vet Anim Sci. 2004;30(2):153-9.
17. Hooper NR, Crabill MR, Taylor TS. Managing vaginal and cervical prolapses in cows. Vet Med. 1999;94:375-89.
18. Siddiquee GM, Bhatol JG, Latif A. Estradiol and progesterone concentrations in prepartum and postpartum vaginal prolapse in buffaloes (*Bubalus bubalis*). Indian J Field Vet. 2006;2:1-3.
19. Kumar SR, Verma HK, Umapathi L, *et al*. Plasma estradiol concentrations during prepartum vaginal prolapse in buffaloes. Indian J Anim Sci. 2009;79:1001-3.
20. Akhtar MS, Lodhi LA, Ahmad I, *et al*. Serum ovarian steroid hormones and some minerals concentration in pregnant Nili-Ravi buffaloes with or without pre-partum vaginal prolapse. Pak Vet J. 2012;32:265-8.
21. Sharawy SM, El Azab MB, Labib FM. Postpartum uterine prolapse in relation to serum calcium, inorganic phosphorous, magnesium and alkaline phosphatase in Egyptian buffalo. 11th Int Congr Anim Reprod AI, Ireland. 1988;215:1-3.
22. Mandali GC, Patel PR, Dhami AJ. Biochemical profile in buffaloes with periparturient reproductive and metabolic disorders. Indian J Anim Reprod. 2002;23(2):130-4.
23. Ahmed S, Ahmad I, Lodhi LA, *et al*. Clinical, hematological and serum macro mineral contents in buffaloes with genital prolapse. Pak Vet J. 2005;25(4):167-70.
24. Akhtar MS, Lodhi LA, Ahmad I, *et al*. Serum concentrations of calcium, phosphorus and magnesium in pregnant Nili-Ravi buffaloes with and without vaginal prolapse in irrigated and rain fed areas of Punjab, Pakistan. Pak Vet J. 2008;28:107-10.
25. Hafez ESE, Hafez B. Reproduction in Farm Animals. 7th ed. New York (NY): John Wiley and Sons; 2013.
26. Dhillon KS, Singh BB, Kumar H, *et al*. Treatment of vaginal prolapse in cows and buffaloes. Vet Rec. 2006;158:312.
27. Singh P, Jain R. Surgical correction of rectal prolapse in buffalo. Int J Agric Sci Vet Med. 2013;1(4):101-2.
28. Dharani S, Kumar GS, Sambasivarao K, Moulikrishna K. Management of a severe post-partum vagino-cervical prolapse in a graded Murrah buffalo with Renault's truss and antibiotic therapy. Buffalo Bull. 2010;29(4):311-4.
29. Kumbhar UB, Suryawanshi AA, Mulani JB, Raghuwanshi DS. Clinical management of post-partum eversion of uterus in Marathwadi buffalo. Vet World. 2009;2(5):202.
30. Mudasir Q, Shukla SP, Nema SP. Haemato-biochemical changes during pre-partum cervico-vaginal prolapse in a she buffalo. Buffalo Bull. 2009;28(3):148-50.
31. Dhillon KS, Singh J. Preliminary observations on the treatment of vaginal prolapse in buffaloes. Punjab Vet J. 2006.