



ISSN: 2456-2912

VET 2024; SP-9(2): 402-405

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Received: 15-12-2023

Accepted: 20-01-2024

Patel MK

College of Veterinary Science and Animal Husbandry, Kamdhenu University, Sardarkrushinagar, Gujarat, India

Parsani HR

College of Veterinary Science and Animal Husbandry, Kamdhenu University, Sardarkrushinagar, Gujarat, India

Chandel BS

College of Veterinary Science and Animal Husbandry, Kamdhenu University, Sardarkrushinagar, Gujarat, India

Corresponding Author:

Patel MK

College of Veterinary Science and Animal Husbandry, Kamdhenu University, Sardarkrushinagar, Gujarat, India

Therapeutic management of pre and post-partum vagino-cervical prolapse in bovine by homoeopathic formulation “Prolapse Cure”

Patel MK, Parsani HR and Chandel BS

DOI: <https://dx.doi.org/10.22271/veterinary.2024.v9.i2Sf.1349>

Abstract

Vagino cervical prolapse is a significant reproductive disorder in cattle and buffaloes, requiring emergency management to prevent complications such as edema, mucosal trauma, contamination, tear and fetal hemorrhage. In this study, a homeopathic formulation called “Prolapse Cure” was successfully used to treat 115 animals with pre- and post-partum vaginal prolapse. The animals were divided into three groups, with group A receiving Prolapse cure and antimicrobial therapy pre-partum, group B receiving the same treatment post-partum and group C receiving only Prolapse Cure for previous prolapse history. In group A, 17 cattle and 24 buffalo showed no recurrence of prolapse after treatment, while some animals displayed mild prolapse towards the end of pregnancy. Group B animals showed complete recovery within 2 days of treatment, with all animals returning to heat within 2-3 months post-calving. In Group C, only 3 buffalo showed mild prolapse during the final days of gestation. Overall, the results indicate excellent recovery in managing vagino cervical prolapse in bovine animals using the homeopathic formulation “Prolapse Cure”. This study highlights the effectiveness of this treatment approach in treating and preventing reproductive disorders in cattle and buffalo.

Keywords: Bovine, pre and post-partum, vagino-cervical prolapse, homoeopathy

1. Introduction

Vaginal protrusion through the vulval lips is known as vaginal-cervical prolapse. In the latter trimester of pregnancy, it is one of the reproductive illnesses that affect adult female cows. The Vagino-Cervical prolapse is an emergency reproductive condition that occurs in all species of domestic animals but most commonly in the bovine (Roberts, 1971) [25]. One of the main reproductive problems affecting cows is vaginal prolapse during pregnancy (Azawi, 2010) [5]. According to Sah and Nakao (2003) [26], it typically happens in the seventh month of pregnancy or right after parturition. It can also occur during postpartum period, during oestrus and post-oestrus period in non-pregnant cows (Youngquist, 1997; Yotov *et al.*, 2013) [33]. Major reproductive disorders in cattle and buffaloes include vaginal prolapse (Ahmed *et al.*, 2005) [1]. This problem is urgent and needs to be treated before it causes severe edoema, mucosal damage, contamination, tearing, or foetal haemorrhage (Miesner and Anderson, 2008) [16]. This disorder is primarily seen in cows because of the hormonal changes that take place during the last trimester of pregnancy. Specifically, the creation of relaxin and an increase in oestrogen lead the pelvic ligaments and associated soft tissue structures to relax (Wolfe, 2009) [32]. Tissue relaxation brought on by the elevated intra-abdominal pressure during pregnancy is a significant risk factor for vaginal prolapse (Kahn, 2005) [12]. Certain minor factors, such as intra-abdominal fat buildup and rumen distention, might elevate intra-abdominal pressure. Additionally, large foetuses, many foetuses, and occasionally hilly terrains can contribute to the occurrence of vaginal prolapse (Drost, 2007) [8]. Nutritional imbalance (Kelkar *et al.*, 1989; Ahmed *et al.*, 2005) [13, 1], hormonal imbalance (Roberts, 1971; Sharma *et al.*, 1977; Arthur *et al.*, 1989; Galhotra *et al.*, 1991; Tyagi & Singh, 2002) [25, 28, 4, 9, 30], seasonal-managemental factors (Mishra *et al.*, 1998; Gurcharan *et al.*, 2003; Akhtar *et al.*, 2010) [17, 10, 3], and genetic predisposition (Nanda and Sharma, 1982) are some of the etiologic factors of prepartum

vaginal prolapse in bovines. According to Nayak and Samantara (2010) [20], chronic vaginal prolapse is primarily linked to tenesmus, which is a condition caused by persistent irritation, such as cervicitis, vaginitis, or traumatising lesions on the vulva and vagina. Three ways are utilised to manage vaginal prolapse in cows, depending on the extent and severity of damage: conservative measures, suturing methods or truss (Parikh *et al.*, 2018) [22], and surgical techniques (Jackson, 2004) [11]. According to Lakde *et al.* (2014) [15], the rope truss is a relatively simple, safe, non-invasive, and effective technique for retaining antepartum cervico vaginal prolapse.

The present study highlights the successful therapeutic management of cervico-vaginal prolapsed by using homeopathic formulation “Prolapse Cure” in bovines.

2. Materials and Methods

2.1 Animal and Location

Cross breed dairy cows and buffalo with history of prolapsed from dairy farmer at Bansakantha district of Gujarat, India for a period of 12 months from January 2022 to May 2023.

2.2 Selection of animals

A list of dairy farm owners from Banas dairy, Palanpur and visited dairy farms. All the animals maintained under stall fed condition. A total of 115 crossbred dairy cows and buffalo of variable age and lactation were selected having history of pre and post-partum vaginal prolapse.

2.2.1 Selection of drugs

A complex of homeopathic remedies *viz.* Prolapse Cure mfd by Ashoka Homeopathic Laboratory, Hissar, Haryana (125006) were selected for the present study to treat pre and post-partum vaginal prolapse along with antimicrobial therapy.

Composition of Prolapse Cure each 5 ml contains

Lilium tigrinum: 200 CH 20%W/V

Podophyllum peltatum: 200 CH 20%W/V

Atropa belladonna 1 M: 20%W/V

Aloes socotrina: 30 CH 20%W/V

Murax purpurea: 30 CH 20%W/V

2.3 Grouping of animals:

All 115 animals were categorized into 3 groups *viz.* group A comprising 50 animals (cow 20 and buffalo 30) having pre-

partum vaginal prolapse, group B comprising 30 animals (cow 10 and buffalo 20) having post-partum vaginal prolapse and group C comprising 35 animals (cow 10 and buffalo 15) having history of pre-partum prolapsed in previous pregnancy. Group A animals were treated with homeopathic remedies *viz.* Proplapse Cure starting from day animal showing prolapsed till parturition along with antimicrobial therapy for four days. Group B animals were treated with homeopathic remedies *viz.* Proplapse Cure starting from day animal showing prolapsed for 10 days along with antimicrobial therapy for two days. Group C animals were treated with only homeopathic remedies *viz.* Proplapse Cure starting from 8 month gestation period till parturition. All the animals were observed daily during course of the treatment till recovery.

2.4 Administration of homeopathic medicine

Two ml of Prolapse Cure were given orally with syringe twice daily per animal till parturition along with antimicrobial therapy *Viz.* Gentamicin Injection @ 5 mg/kg bwt 12 hours interval was also administered by IM route daily for 4 days in group A and Group B 2 ml of Prolapse Cure were administered orally with syringe twice daily per animal for 10 days along with antimicrobial therapy *Viz.* Gentamicin Injection @ 5 mg/kg bwt 12 hours interval was also administered by IM route daily for 2 days. While in Group C animals only Homeopathic formulation “Prolapse Cure” 2ml were after symptoms of prolapsed were given orally with syringe twice daily per animal till parturition. All the animals were carefully observed daily during course of the treatment till recovery.

3. Results

In present study pre-partum prolapsed group-A animals comprising 20 cattle and 30 buffalo among them 17 cattle and 24 buffalo having no recurrence of vaginal prolapsed after 4 days post treatment till parturition but in 3 cattle and 6 buffalo having mild vaginal prolapsed last 2-3 of pregnancy. Post-partum prolapsed group-B comprising 10 cattle and 20 buffalo all animals having no straining and vaginal prolapsed after 2 day post treatment and all animals were return to heat within 2-3 months post calving. While group-C having 10 cattle and 25 buffalo having history of vaginal prolapse in previous gestation among them only 3 buffalo having mild vaginal prolapsed observed during last 4 days of gestation (Table-1).

Table 1: Results of treatment in pre and post-partum vagino-cervical prolapsed in bovine

Sr no	Treatment	Group A		Group B		Group C	
		Pre-Partum vaginal prolapse		Post-Partum vaginal prolapse		Vaginal Prolapse in previous gestation	
		Cattle (20)	Buffalo (30)	Cattle (10)	Buffalo (20)	Cattle (10)	Buffalo (25)
1	Antibiotic Therapy	Inj. Gentamicine @ 5 mg/kgbwtd bid I/M for 4 days	Inj. Gentamicine @ 5 mg/kgbwtd bid I/M for 4 days	Inj. Gentamicine @ 5 mg/kgbwtd bid I/M for 2 days	Inj. Gentamicine @ 5 mg/kgbwtd bid I/M for 2 days	No Antibiotic	No Antibiotic
2	Homeopathic formulation “Prolapse Cure”	2 ml bid orally with syringe till parturition	2 ml bid orally with syringe till parturition	2 ml bid orally with syringe for 10 days	2 ml bid orally with syringe for 10 days	2 ml bid orally with syringe till parturition	2 ml bid orally with syringe till parturition
3	Efficacy of treatment	On 3 rd day no straining and vaginal prolapsed was observed till parturition except in 3 case where last 2-3 days slight vaginal prolapsed was noticed	On 4 th day no straining and vaginal prolapsed was observed till parturition except in 6 case where last 2-3 days mild vaginal prolapsed was noticed	On 2 nd day no straining and vaginal prolapsed was observed and animals return to heat within 2 months	On 2 nd day no straining and vaginal prolapsed was observed and animals return to heat within 3 months	During advanced pregnancy no vaginal prolapsed was observed	During advanced pregnancy no vaginal prolapsed was observed except in 3 cases where last 4 days mild vaginal prolapsed was observed

4. Discussion

Prevention of recurrence was achieved with the application of rope truss technique following standard operational procedure described by Kumar (2015) [14] with a 3 mm diameter sized jute rope. Only a rope truss was applied for physical immobilization around the vulva. According to Lakde *et al.* (2014) [15], the rope truss is a relatively simple, safe, non-invasive, and successful way to retain vagino-cervical prolapse. In buffaloes with vaginal prolapse, progesterone concentrations have been found to decrease (Zicarelli, 2000) [34]. According to Wolfe (2009) [32], placental oestrogen production increases in the last trimester of pregnancy, which is also when vaginal or vagino-cervical prolapse most frequently occurs. Increased oestrogen production causes relaxin to be produced, which relaxes the pelvic ligaments and surrounding structures. This leads to edoema and relaxes the vulva and vulvar sphincter muscles. Some cows and buffaloes had increased abdominal pressure, which caused the loosely linked vagina and bladder to evert through the vulva. These animals also experienced more relaxing of the pelvic tissues in the near term. Vaginal prolapse can be caused by a number of predisposing circumstances, including abdominal straining, slack pelvic ligament, open cervix, and atony from hypocalcaemia. Low serum progesterone concentrations have been linked to pre-partum vagino-cervical prolapse in cattle (Bhattacharyya *et al.*, 2012) [6] and buffaloes (Sah and Nakao, 2003) [26]. These reports demonstrate the effectiveness of progesterone therapy in treating pre-partum vagino-cervical prolapse. Patidar *et al.* (2010) [23] also noted a higher frequency of genital prolapse in buffaloes with gestations longer than eight months. At the time of the vaginal prolapse, straining was thought to be caused by infection of the urethra and vagina from the prolapsed mass. Suspecting the possibility of urinary tract infection based on results of urine examination and clinical symptoms, the buffalo was treated with Gentamicin Injection @ 5 mg/kg bwt 12 hours interval was also administered by IM route daily for 2-4 days. "Prolapse Cure" is a homeopathic formulation that contains the following ingredients: *Lillium tigrinum* 200 CH 20%W/V, *Podophyllum peltatum* 200 CH 20%W/V, *Atropa belladonna* 1 M 20%W/V, *Aloes socotrina* 30 CH 20%W/V, and *Murax purpurea* 30 CH 20%W/V. It is administered twice a day using a syringe in the mouth. After three days of treatment, all animals responded well to the medication, and appropriate urine flow was seen. Additionally, the animal's feed intake improved, and there was no longer any straining or vagino-cervical prolapse. The vulva was physically immobilised using a rope truss, which was removed after three days of treatment. With the aid of a mouth syringe, administer 2 millilitres of the homeopathic formulation "Prolapse Cure" twice a day. No more therapy was given. All parturiting animals were healthy and uneventful, with the exception of a small amount of manual help needed to remove the calf. The results of present trial show excellent recovery in the management of pre and post-partum vagino-cervical prolapse in bovine. Homeopathic complexes have commercially popular in European countries. *Lilium tigrinum*, which manifests powerful influence over the pelvic organs specially uterus and adapted to many reflex states dependent on some pathological condition of uterus like congestion of uterus and prolapsed conditions. *Podophyllum peltatum*, which help in reducing pain in straining with prolapsed and also effect on pelvic tenesmus which help in prevention of prolapse. *Atropa belladonna*, which has marked action on the vascular system and acts upon every part of the nervous system ultimately

help in reduction of redness and burning sensation while urination. Also act as local anaesthetic and antispasmodic property which help in prevention of prolapse. *Aloes socotrina*, it is an excellent remedy to aid in re-establishing physiological equilibrium and prevent colic and burning sensation. *Murax purpurea*, it effect on female genital organ which reduce pain during prolapsed and pelvic tenesmus resulting which help in prevention and reoccurrence of prolapse during pregnancy and after parturition. (William Boerick, 1906) [31]. In India, some preliminary trials using homeopathic combination remedies in the treatment of dairy animals have been reported with promising results (Parsani *et al.*, 2022) [21]. Compared to allopathic treatment, the homeopathic formulation "Prolapse Cure" had an average total cost of therapy that was much cheaper. Furthermore, unlike animals treated with allopathy, those treated with homeopathy were simple to cure and did not have the issue of residue in animal products. The inability to sell milk during the "withdrawal period" after allopathic therapy and the organic farming standards' prohibition on preventive antibiotic treatments have put financial strain on dairy farms and prompted them to look for alternatives. While homeopathy has emerged as a favoured alternative approach, progressive farmers and veterinarians are increasingly interested in using alternative therapy in organic farming systems.

5. Conclusion

Thus, it can be said that homeopathic treatment using the "Prolapse Cure" was a very successful, non-invasive, non-hormonal, non-antibiotic, easy to administer, and less expensive method for treating vagino-cervical prolapse in bovines before and after parturition without any complications or difficulties.

6. Acknowledgment

The authors are appreciative of Ashoka Homeopathic Lab's assistance in providing the homeopathic formulation "Prolapse Cure" from Hisar, India.

7. References

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