



ISSN (E): 2277- 7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2021; SP-10(5): 706-708
© 2021 TPI
www.thepharmajournal.com
Received: 04-03-2021
Accepted: 07-04-2021

Dr. Sandhya Rani Dasari
Private Veterinary Practitioner,
Jagityal, Telangana, India

Dr. Aruna Maramulla
Private Veterinary Practitioner,
Department of Veterinary
Medicine, Godavarikhani,
Telangana, India

Therapeutic management of uterine prolapse in buffalo

Dr. Sandhya Rani Dasari and Dr. Aruna Maramulla

Abstract

Uterine prolapse is a medical emergency that should be addressed as soon as possible. It's simple to diagnose, but it's difficult to treat. If we don't handle the animal right away, as the uterus prolapses, pressure is applied to large uterine vessels, which may result in vessel rupture, causing internal bleeding lead to hypovolemic shock and death of the animal. Buffaloes are more likely than cows to have uterine prolapse. Delaying the postpartum return to estrus, conception rate, and calving interval, uterine prolapse has a negative impact on cattle reproductive and productive efficiency. This article discusses the effective clinical treatment of uterine prolapse in 6 years old buffalo, which was treated with the 3 Rs (reduction, repositioning, and retention) under epidural anesthesia. To retention of prolapse used the ropetruss method to keep the prolapse in place.

Keywords: Buffalo, epidural anesthesia, retention, rope truss method, uterine prolapse

Introduction

The term “prolapse” refers to an organ’s irregular repositioning from its usual anatomical location. Incidence of prolapse as high as 43% has been reported in buffaloes (Samad *et al.*, 1987) ^[11] but in cattle it is only 1 to 2% (Woodward and Quesen berry, 1956; Patterson *et al.*, 1981) ^[8, 15]. Post-partum of uterus is occurs 48 to 72 hours after parturition (Arthur, 1996; Roberts 1971) ^[3, 10]. It is a common complication in 3rd stage of labor in cow (Joseph *et al.* 2001) ^[6]. Uterine prolapse occurs when the previously gravid uterine horn becomes invaginated/folded in after calving and protrudes from the vulva. It is also termed as eversion of uterus or casting of “Wethers” or casting of calf bed. In lay man term also called as Bhelly Nikalna or Phool Nikalna. The reproductive tract of cattle has two forms of prolapses that are vaginal and uterine. Unlike vaginal prolapse, uterine prolapse is not heritable. Both prolapse cases require early treatment, prevention of recurrence. The female reproductive system includes both the vaginal and uterine cavities. Understanding how the reproductive tract is organized is crucial to understanding prolapses. The cervix separates the vaginal canal from the uterus. During pregnancy, the cervix closes the uterus to the “outside.” The cervix dilates during child birth to enable the calf to leave the uterus, move through the vagina and into the world. Although they are both a part of the reproductive tract, they are distinct anatomical structures with somewhat different functions. Present article covers causes, clinical signs, management of prolapse. Postpartum uterine prolapse is more common than prepartum prolapse due to the sudden release of elevated intra- abdominal pressure, uterine inertia and loss of muscular tonicity (Noakes *et al.* 2001) ^[7]. Other causes for uterine prolapse are weak body condition, smooth floors, a previous vaginal prolapse, excessive estrogen content in feed (Janie, 2006; Jackson, 2004) ^[5] and dystocia. According to a few authors, 40 percent of cows become pregnant after uterine prolapse. If treatment is started in right away, post-operative fertility rate of 40-60% has been recorded (Taygi and Singh, 2002) ^[13].

Case history

The buffalo in present case was 6 years old in her third lactation and prolapse occurred after 24 hours of calving. The current case of Buffalo prolapses happened as a result of local people using more force to extraction of the fetus out of the animal's birth canal.

Clinical signs

Prolapsed mass is larger and longer (usually hanging down to the hocks when standing), deep red in color, visible placentomes, animal was in recumbency, severe straining, anorexia, prolapsed mass was lying on the ground and it contains dung, soil and dust.

Corresponding Author:
Dr. Sandhya Rani Dasari
Private Veterinary Practitioner,
Jagityal, Telangana, India

Materials and Methods

In present case, limit the animal movement to avoid uterine artery rupture or avulsion from the internal iliac, which could result in fatal hemorrhage. The prolapsed organ covered by a large towel or sheet carried by people on either side. Then empty the bladder because the urethra remains at an acute angle during prolapse, preventing urination. As a result, we must raise the uterus, which causes the urethra to straight in position, allowing the animal to urinate, resulting in increased relaxation and less straining. Wash the everted organ with warm water and potassium permanganate solution (1:1000) and given epidural anesthesia with 2 percent Lignocaine hydrochloride @ 5 ml at the intercocygeal junction.

1. Reduction of swollen prolapsed mass carried out by applying sugar, ice packs and herbal POP_IN spray. Lubricated the prolapsed mass with Lignocaine jelly to reduce straining and applied antibiotic dicrysticin powder to provide antibacterial cover.
2. Repositioning a prolapsed mass accomplished by softly pushing with one fist hand while elevating the mass with the palm of the other. The prolapsed mass was pushed back into pelvic cavity till completely repositioning of the uterus. Then intra uterine administration of antibiotic done with two furea bolus. After that conformed the position of uterus by per rectal examination.
3. Retention of prolapsed mass done by applying the rope truss method. In India rural areas, the use of rope truss is a common method for preventing genital prolapse recurrence (Sharma *et al.* 2017) ^[12]. Rope truss method is very effective, noninvasive, easy & less expensive method for successful management of prolapse of uterus in Buffalo.

Medical treatment

The animal was treated with CBG (calcium borogluconate) @ 450 ml slow I/V for one day; Rintose (Multi Electrolyte with 20% W/V Dextrose injection) @ 1000 ml per day I/V for 3 days; Antibiotic Triax S3 (Ceftriaxone & Sulbactam) (3g) @ 10 mg per Kg body weight for 5 days; NSAID Melonex (Meloxicam) @0.2 to 0.5 mg per kg B. weight I/M;

Antihistamine Histanil (Chlorpheniramine malate) @10 ml for 5 days; Tonophosphan (Sodium salt of 4- Dimethylamino-2methylphenyl-phosphonic acid) 2 to 5 ml BID, I/M for 5 days ; Intavita H (vitamin A) 5ml per 300 kg Body weight I/M for 3 days; Agrimin forte (Mineral mixture) 100 mg for 5days; Oral calcium preparation (Calshakti) 25 to 50 ml orally for 5 to 10 days.

Post-operative care of animal

Allow the animals to little exercise, give less bulky diet, avoid feeding of estrogenic plants, giving less feed and water several times in a day and keeping a close eye on these animals are all things that should be considered. During post-operative care, no further prolapse symptoms or clinical deviations were observed. After 10 days of closed observation of animal the rope was removed.

Results and Discussion

Buffalo was recovered in just 7 days. The ceftriaxone antibiotic works well, oral calcium also given good result. The animal was in a recumbent position on the first day of uterine prolapse but after being given I/V infusion, animal eventually stood up. Dicrysticin cover on prolapsed mass given good results by avoiding uterine infection whereas Ahuja *et al.* (2016) ^[1] got good results with Soframicin ointment. Uterine prolapse is a painful and serious condition that cause most animals to be unable to stand for long periods of time. Uterine prolapse causes animal to recumbent in either a sternal or lateral position (Richardson *et al.*, 1987) ^[9]. The animal must be placed in the right position to prevent During the treatment of the prolapsed uterus. It is difficult to perform a reduction of prolapse if animal have bloated rumen. Hormonal changes before parturition, as an increase in oerstrogen, which stimulates the relaxin hormone cause the pelvic ligaments to relax and the cervical to weaken, predisposing the animal to prolapse (Wolfe, 2009) ^[14]. According to Arthur (2001) ^[2] hypocalcemia is the most common cause of uterine prolapse. After application of an ointment or lubricant perform manual massaging of prolapsed mass during repositioning is an effective alternative technique (Youngquist, 1997) ^[16].



Fig 1: Condition of animal before and after treatment

Conclusion

Clinical management of uterine prolapse in buffalo is presented and discussed. In this case ceftriaxone gave good

result to avoid secondary bacterial infections and animal responded quickly. Rope truss method is very easy to apply, effective, and does not cause any injury to the vulval lips.

References

1. Ahuja AK, Singla VK, Singha S, Shivkumar. Management of Post- partum bilateral uterus in crossbreed cow _ a case report. *Haryana vet. J* 2016;55(2):239-240.
2. Arthur GH. *Veterinary Reproduction and Obstetrics*. (8th Ed.) Harcourt (India) Private Limited 2001.
3. Arthur GH, Noakes DE, Pearson H. *Veterinary Reproduction and Obstetrics*. (6th edn.). Bailliere and Tindal, London 1996.
4. Hanie EA. *Prolapse of Vaginal & Uterus: Text Book of Large Animal Clinical Procedures for Veterinary Technicians*. Elsevier, Mosby 2006.
5. Jackson PGG. *Post-parturient Problems in Large Animal. Hand Book of Veterinary Obstetrics* (2nd edn.). Elsevier Saunders 2004.
6. Joseph C, Kulasekar K, Balasubramanian S, Kathiresan D, Veerapandian C, Pattabiraman SR. An unusual complication of post-partum uterine prolapse in a she buffalo-a case report. *Indian Vet. J* 2001;78:57-58.
7. Noakes ED, Parkinson TJ, England GCW. *Arthur's Veterinary Reproduction and Obstetrics*. (8th edn.). Harcourt (India) Private Ltd., New Delhi 2001.
8. Patterson DJ, Bellowsa RA, Burfeningz PJ. Effects of caesarean section, retained placenta and vaginal or uterine prolapse on subsequent fertility in beef cattle. *J Anim. Sci* 1981;53:916-921.
9. Richardson GF, Klemmer AD, Knudsen DB. Observations in uterine prolapse in Beef cattle. *Can. Vet. J* 1981;22:189-191.
10. Roberts SJ. *Veterinary Obstetrics and Genital Diseases*. (2nd edn.). C.B.S. Publisher and Distributors, Delhi 1971.
11. Samad HA, Ali CS, Rehman NU, Ahmad A, Ahmad N. Clinical incidence of reproductive disorders in buffaloes. *Pakistan Vet J* 1987;7:16-19.
12. Sharma DK, Das A, Nath N. Management of Pre-Partum Vaginal Prolapse in a Crossbreed Cow with Rope truss method. *Int. J Curry. Microbiol. App. Sci* 2017;6(11):1067_1070.
13. Tyagi RPS, Singh J. *A Text Book of Ruminant Surgery*, 1st Edit 2002.
14. Wolfe DF. Medical and Surgical management of vaginal prolapse in cattle. In proceeding of 81st Annual Western Veterinary Conference, USA 2009.
15. Woodward RR, Quesenberry AA Jr. Study of vaginal and uterine prolapse in Herefordcattle. *J Anim. Sci* 1956;15:119-124.
16. Youngquist RS. Bovine uterine prolapse. In: *Current Therapy of Large Animal Theriogenology*. (Youngquist, R. S., Ed.). W. B. Saunders Co., Philadelphia, PA, U. S.A 1997, 76-81.