Bio Research Journal
ISSN: 2997-4232 |
Volume 10 Issue 4, October-December, 2022
Journal Homepage: https://ethanpub.online/Journals/index.php/E20
Official Journal of Ethan Publication

A JOURNEY OF HOPE: HOW A NON-DESCRIPT DOE RECOVERED FROM TOTAL UTERINE PROLAPSE AFTER ABORTION

Aravindan Srinivasan and Anusha Krishnan Nair

Department of Veterinary Gynaecology and Obstetrics, Veterinary College and Research Institute, Tamil Nadu Veterinary and Animal Sciences University, Orathanadu, Thanjavur (Dt) -614 625 Tamil Nadu

Abstract

This article reports on the successful management of total uterine prolapse in a non-descript doe following an abortion. Uterine prolapse is a common occurrence in goats after parturition due to a lack of uterine tone, a dilated cervix, and/or retention of placenta. In this particular case, straining during an abortion caused the prolapse. The article details the case history and treatment procedure, which included administering epidural anesthesia, washing the prolapsed uterus, removing adhered fetal membranes, and closing the tear with a simple interrupted suture. The article recommends elevating the hindquarters of the animal for easy replacement of the prolapsed mass, and administering oxytocin and other medications to increase uterine tone. The success of the treatment depends on a systematic approach, and it is recommended that farmers receive preliminary education to prevent complications. Proper treatment involves washing and removal of adhered tissues, closure of any tears, and replacement of the prolapsed mass. Antibiotics, anti-inflammatories, and antihistamines should be administered to prevent infection and inflammation, and retention sutures and tetanus toxoid should be used for prophylaxis. Through implementing proper management techniques, uterine prolapse can be successfully treated in goats.

Keywords: Total uterine prolapse, Abortion, Doe.

Introduction

The uterine prolapse in goats may be complete with both the horn protruding out from vulva or may be limited to uterine body (Noakes *et al.,* 2009). It is simply an eversion of the uterus which turns inside out as it passes through the vagina. Prolapse of the uterus generally occurs immediately after or a few hours of parturition when the cervix is dilated and lack of uterine tone (Hanie, 2006). Prolapse that occur more than 24 hours post-partum is extremely rare and is complicated by partial closure of the cervix, making replacement is difficult or even impossible (Fubini and Ducharme, 2006). In the present case, prolapse would have occurred due to persistent straining due to abortion. Uterine tear would have occurred due to stamping of fetal membranes.

Bio Research Journal
ISSN: 2997-4232 |
Volume 10 Issue 4, October-December, 2022
Journal Homepage: https://ethanpub.online/Journals/index.php/E20
Official Journal of Ethan Publication

Case History and Observations

A two and half years old pluriparous non-descript doe was presented to Large Animal Obstetrical Unit of VCC, VCRI, Orathanadu with the history of animal aborted 3 dead fetuses at 4th month of gestation on previous day evening. Immediately after fetal expulsion, the prolapse of the entire uterus occurred. At the time of observation, the animal was dull and depressed. On clinical examination of the animal showed a pale visible mucus membrane and other clinical parameters were normal. On gross examination, the entire uterus was hanging outside (Fig.1). The fetal membranes were tightly adhered over maternal caruncles (Fig.2). The maternal caruncles were small and not fully developed. A tear of about 5cm length was noticed at the base of uterus (Fig.3). Examination of the prolapsed mass revealed edematous and necrotic uterus soiled with dung and dust over the entire mass. Immature caruncles were observed. Based on these examinations the case was diagnosed as a total uterine prolapse subsequent to abortion. This Condition characterized clinically the entire uterus is everted, often with the placenta still attached.

Fig 1. Eversion of entire uterus

Fig 2. Adherent of fetal membrane

Fig 3. Tear at the base of

Treatment and Discussion

The animal was administered with 1.5ml of 2% Lignocaine hydrochloride at first intercoccygeal space epidurally to reduce the straining. The dung, dirt and dust materials adhering to the mass were removed by washing the mass with 1 % potassium permanganate solution (Srinivasan, 2018). The adherent foetal membranes were separated and removed from the maternal caruncles. The tear on the uterus was closed by simple interrupted suture (Fig.4) using No.2 chromic catgut (Gupta, 2018). The edema was reduced by washing the mass with hypertonic saline solution. Cetrimide cream was liberally applied over the mass. The hind portion of the animal was elevated by folding the hind limbs at the level of hock joint. The vulval lips were pulled apart and the everted mass was reduced using the palm of both the hands with moderate force the prolapsed uterus was gently pushed in through the vagina. The proper replacement was ensured by introducing the hand through the cervix. The prolapsed mass was reduced and replaced manually (Fig.5). Once the uterus is replaced, the operators hand should be inserted to the tip of both uterine horns to be sure that no remaining invagination could inicite abdominal straining and recurrence (Fubini and Ducharme, 2006). If the uterus is completely and fully replaced all the way to the tip of the uterine horns, the prolapse is unlikely to occur (Hanie, 2006). Vulval retention suture was applied to prevent recurrence and a dose of tetanus toxoid was given as a preventive measure. (Nair et.al. 2019). Animal was administered with inj. Calcium borogluconate (75ml IV) inj. Oxytocin (10 IU IM), Intravenous administration of 250 ml of 25% Dextrose, inj.Enrofloxacin (125 mg IM), inj.Chlorpheniramine maleate (12.5mg IM), inj.Dexamethasone (1mg IM). The

Bio Research Journal
ISSN: 2997-4232 |
Volume 10 Issue 4, October-December, 2022
Journal Homepage: https://ethanpub.online/Journals/index.php/E20
Official Journal of Ethan Publication

antibiotic, anti-inflammatory and antihistamine were continued for 2 more days and The sutures were removed on the 8th day from the initial date of the presentation (Sonu (Nair *et.al.,* 2019) and the animal had recovered uneventfully.

Fig. 4. Tear was repaired

Fig. 5. After reduction of the prolapsed mass.

Prolapse of uterus normally occurs during third stage of labor (Noakes *et al.,* 2009). and in small animals, complete prolapse of both the uterine horns is usual (Jackson, 1995). The etiology of uterine prolapse is unknown, but many factors have been associated with prolapse (Jackson, 2004 and Hanie, 2006). Hanie EA (2006) reported that the prolapse is reported to occur due to poor body condition, lack of uterine tone, retention of placenta and irritation in birth canal during parturition. But in the present case prolapse of uterus was observed after forceful delivery of fetuses. The goal in the treatment of uterine prolapse is replacement of the organ followed by a method to keep it in a retained position. A caudal epidural anaesthesia is essential before replacement of a uterine prolapse as it decreases straining and desensitizes the perineum (Hanie, 2006). The uterine prolapse can be replaced with the animal in standing or recumbent position (Hanie,2006). For easy replacement of prolapsed mass the hind quarters of the animal has to be elevated so as to create gravity in abdomen to anterior side so that pressure of visceral organs are reduced in pelvic cavity. Once the uterus is in its normal position, oxytocin 10 IU intramuscularly should be administered to increase the uterine tone (Senthilkumar, 2017). It has also been reported that most animals with uterine prolapse are hypocalcaemic (Fubini and Ducharme, 2006). A post operative advice, the owner was briefed for split feeding rather for bulk feeding and also to raise the hind quarter to prevent recurrence and complication The future fertility of goats is not affected unless there is not much injury or lacerations or gangrenous changes in the uterus (Nair et.al., 2019). However the success depends on the systematic approach even if the case is severe Hence, It is recommended for timely and proper systematic approach and preliminary education to the farmers.

Conclusion

Successful management of total uterine prolapse was done in doe.

References

Hanie, E.A., (2006) Prolapse of the Vaginal and Uterus: Text Book of Large Animal Clinical Procedures for Veterinary Technicians. Elsevier, Mosby, St. Louis, MO, USA. [2] Fubini, S.L, and Ducharme G.N. (2006) Surgical Conditions of the Post-Partum Period in Text Book of Farm Animal Surgery. Saunders, Elsevier, St. Louis, MO, USA.

Noakes, D.E., Parkinson, T.J. and England, G.C.W.2009. Veterinary Reproduction and Obstetrics. Saunders. p. 322-33.

Jackson, P.G. (1995). Post parturient problems in large animals. Handbook of Veterinary Obstetrics, (2edn), Elsevier Saunders, UK.

Nair. S., Khan Sharun. K, Anuraj. R and Mathew. J. (2019). Management of Post Partum Uterine Prolapse in Malabari Goat, *Int. J. Curr. Microbiol. App. Sci.,* 8(5): 2136-2140.

Srinivasan. C and Sathya. P. (2018). Management of post partum total uterine prolapse in a non-descript doe under field condition: A case report. *The Pharma Innovation Journal.* 7(2): 173-174.

Gupta. S., Sharma. A, Singh. M. (2018). Post-Partum Uterine Eversion and its Management in A Doe: A Case Report. *Dairy and Vet Sci J.,* 8(2).

Senthilkumar, A., P. Balamurugan. P, N. Sribalaji. N and Srinivasan. G. (2017). Post partum total uterine prolapse in a goat. *International Journal of Science, Environment and Tech.*, Vol.6, No 1, 770-773.