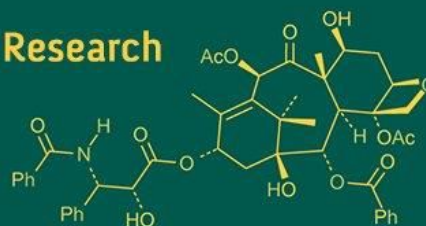


International Journal of Advanced Biochemistry Research



ISSN Print: 2617-4693
ISSN Online: 2617-4707
IJABR 2025; SP-9(6): 436-438
www.biochemjournal.com
Received: 22-03-2025
Accepted: 26-04-2025

Poornima
Veterinary officer (Contract),
VD Harsoor, Taluk and
District Kalaburagi,
Karnataka, India

Mohd Mujaheed Pasha
Assistant Professor (C),
Department of ARGO,
Veterinary College, Bidar,
Karnataka, India

Malasri G
Assistant Professor,
Department of ARGO,
Veterinary College, Bidar,
KVAFSU Bidar, Karnataka,
India

Venkanagouda D
Associate Professor and Head
(I/C), Department of ARGO,
Veterinary College, Bidar,
KVAFSU Bidar, Karnataka,
India

Bijurkar RG
Professor and Head,
Department of VCC,
Veterinary College, Bidar,
KVAFSU Bidar, Karnataka,
India

Corresponding Author:
Poornima
Veterinary officer (Contract),
VD Harsoor, Taluk and
District Kalaburagi,
Karnataka, India

Clinical management of post-partum uterine prolapse in a non-descript goat

Poornima, Mohd Mujaheed Pasha, Malasri G, Venkanagouda D and Bijurkar RG

DOI: <https://www.doi.org/10.33545/26174693.2025.v9.i6Sf.4644>

Abstract

A multiparous 4-year-old non-descript goat presented to Department of Animal Reproduction, Gynaecology and Obstetrics, Veterinary college, Bidar with the history of complete uterine eversion since 4 hours after kidding to live triplets. On clinical examination, both the uterine horns were everted through vulva with prominent caruncles. Prolapsed uterine horns were oedematous and contaminated with dirt. All the clinical parameters were within normal range. Epidural anaesthesia was given with 1% lignocaine. The everted mass was cleaned with mild potassium permanganate solution. Bladder was emptied by catheterization and ice-packs were placed over the everted part to reduce the oedema. Ointment lignocaine and Soframycin was smeared over the uterine mucosa and proper reposition was done as per standard procedure gently. Post management was done by administering antibiotics, antihistamine, calcium borogluconate, oxytocin and intra-uterine antibiotic. Animal recovered uneventfully.

Keywords: Uterine eversion, non-descript goat, post-partum, triplets

Introduction

Postpartum uterine prolapse is an eversion of the uterus which turns inside out as it passes through the vagina. Prolapse of the uterus is a common complication of the third stage of labour in the cow and less commonly, of the ewe and doe goat (Noakes *et al.*, 2019) [4]. It generally occurs immediately after or few hours of parturition when cervix is open and uterus lacks tone (Hanie, 2006) [3]. The etiology of the condition is not fully elucidated but is clearly multifactorial (Dawson and Peter, 2012) [1]. These includes poor uterine tone, increased straining caused by pain, excess traction during dystocia, retention of placenta and excessive estrogen content in the feed. Shortly after the event, the prolapsed tissue initially appears to have a normal texture but becomes damaged within a short span of time. The placenta may likely be retained during this period (Roberts, 1986) [7]. The uterus protrudes from the vulva, often hanging below the animal's hock, rendering it more prone to injury (Senthilkumar *et al.*, 2017) [8] which results in complications like haemorrhage from a major uterine blood vessel which can result in hypovolemic shock, involvement of other organs (bladder, intestine) (Noakes *et al.*, 2019) [4] and tearing of the prolapsed uterus (Potter, 2008) [6]. It is an alarming situation in which the uterus is prolapsed through the vagina and hence requires immediate intervention. Recovery of case depends on type of case presented, duration of case and damage to uterus. Present case aims to management of uterine prolapse in small ruminants.

Materials and Methods

A 4-year-old non-descript goat was presented to Department of Animal Reproduction, Gynaecology and Obstetrics, Veterinary college, Bidar with the history of kidding to live triplets in the previous night and complete uterine eversion from 4 hours. On clinical examination, both the oedematous uterine horns with prominent caruncles were everted through vulva (Figure 1). Under epidural anaesthesia (sacroccocygeal region) using 1% lignocaine (Figure 2), the everted mass was cleaned with mild potassium permanganate solution. Three 'R' concepts were used for correction. Firstly, bladder was emptied by passing an AI sheath and oedema was reduced by application of ice-packs (Figure 3).

After application of lignocaine gel and soframycin ointment, everted mass was repositioned gently and properly, by elevating the hind quarters with the help of two assistants that facilitated the easy placement of uterus into normal anatomical position (Figure 4-a and b). Further, straining tendency was less from the goat as well as everted mass was properly replaced hence, it was decided not to use any sutures for retention. A course of antibiotic (Ceftriaxone tazobactam-562.5 mg-I/V), antihistamine (Chlorpheniramine maleate 30 mg-I/V), calcium borogluconate-60 ml-I/V, oxytocin-10IU-I/M and intra-uterine antibiotic (Lenovo AP-30 ml IU) for 3 days was administered.



Fig 1: The prolapsed uterus hanging from the vulva



Fig 2: Epidural anaesthesia



Fig 3: Application of ice-packs



Fig 4a: Repositioning of uterus;



Fig 4b: After reposition of uterus

Results and Discussion

Prolapse of the uterus normally occur during the third stage of labor at a time when the fetus has been expelled and the fetal cotyledons has separated from the maternal caruncles (Noakes *et al.*, 2019) ^[4]. In this case prolapse of uterus occurred within mean period of 12hours. An epidural anaesthesia using 1% lignocaine proved essential for decreasing the straining (Hanie, 2006) ^[3] and fully replacement of uterine horns. Once the uterus is replaced, the operators should ensure that both tips of uterine horns should not have invagination to prevent reoccurrence of

prolapse due to abdominal straining (Fubini and Ducharme, 2006) ^[2]. If the uterus is completely and fully replaced all the way to the tips of the uterine horns, the prolapse is unlikely to occur (Hanie, 2006) ^[3]. Administration of calcium borogluconate and oxytocin facilitated to increase the uterine tone. An injectable broad-spectrum antibiotic once administered for three to five days after replacement of the prolapsed will prevent secondary bacterial infection (Plunkett, 2000) ^[5]. The hindquarters of the animal can be elevated to ease the pressure exerted by the visceral organs thus facilitating easy replacement of the prolapsed mass (Velladurai *et al.*, 2016) ^[9]. Animal recovered uneventfully. Proper management of uterine prolapse is important since it will enable the animal to be conceived again without any complication. Hence, the duration of prolapse is one of the critical factors that decide the success while managing the prolapsed uterus.

Conclusion

In this case, prolapse of uterus occurred within mean period of 12 hours. Epidural anaesthesia using 1% lignocaine proved essential for decreasing the straining and fully replacement of uterine horns. Administration of Calcium borogluconate and Oxytocin facilitated to increase the uterine tone. Animal recovered uneventfully. Proper management of uterine prolapse is important since it will enable the animal to be conceived again without any complication.

Acknowledgments

The author would like to thank to the individuals of the Department of ARGO for proper guidance in treatment of the uncommon case in goat.

References

1. Dawson LJ, Peter AT. An update on vaginal and uterine eversions in cattle. *Clinical Theriogenology*. 2012;4(2):115-131.
2. Fubini SL, Ducharme GN. Surgical conditions of the postpartum period. In: Fubini SL, Ducharme GN, editors. *Textbook of Farm Animal Surgery*. St. Louis: Saunders Elsevier; 2006. p. 333-338.
3. Hanie EA. Prolapse of the vaginal and uterus. In: *Textbook of Large Animal Clinical Procedures for Veterinary Technicians*. St. Louis: Mosby Elsevier; 2006. p. 218-221.
4. Parkinson TJ, Noakes DE. Injuries and diseases consequent upon parturition. In: Noakes DE, Parkinson TJ, England GCW, editors. *Veterinary Reproduction and Obstetrics*. 10th ed. St. Louis: WB Saunders; 2019. p. 333-348.
5. Plunkett SJ. Vaginal edema (hyperplasia) or prolapse and uterine prolapse. In: *Emergency Procedures for the Small Animal Veterinarian*. 3rd ed. St. Louis: Elsevier Health Sciences; 2013. p. 217-218.
6. Potter T. Prolapse of the uterus in the cow. *UK Vet Livestock*. 2008;13(1):25-28.
7. Roberts SJ. Injuries and diseases of the puerperal period. In: *Veterinary Obstetrics and Genital Diseases (Theriogenology)*. 3rd ed. Ann Arbor: Edwards Brothers; 1986. p. 353-396.
8. Senthilkumar A, Balamurugan P, Sribalaji N, Srinivasan G, Murugesan S. Post-partum total uterine prolapse in a goat. *International Journal of*

Environmental Science and Technology. 2017;6:770-773.

9. Velladurai C, Selvaraju M, Napoleon RE. Postparturient total uterine prolapse and its management in a goat. *Indian Journal of Veterinary*. 2016;93:60-61.