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## Clinical management of postpartum uterine prolapse in goats

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### Abstract

Three female goats (doe) aged about 3 to 5 years were presented to the Veterinary Clinical Complex, Bihar Veterinary College, Patna with complaints of postpartum uterine prolapse. All cases were managed successfully by reduction, reposition and retention process and treated with injection calcium borogluconate, 5% dextrose normal saline (DNS), oxytocin (10 IU), ceftriaxone, meloxicam, and vitamin (B<sub>1</sub>, B<sub>2</sub>, B<sub>6</sub>, B<sub>12</sub> and nicotinamide). There was uneventful recovery from condition without any complications and reoccurrence.

**Keywords:** Doe, epidural, reduction, reposition, reposition, uterine prolapse

### Introduction

The Goat is a poor man's cow. In this regard, one of the problem is uterine prolapse in Doe and emergency condition which needs immediate proper treatment (Gupta *et al.*, 2018) [5]. The Uterine prolapse is a complication found in third stage of labour and common in cattle and ewes lesser in does and least in sows, mares and bitches (Arthur *et al.*, 1989) [1]. Immediately after delivery of new born kids, postpartum uterine prolapse may occur in which uterus is everted out and found hanging down from vulva to hock joint (Hanie, 2006) [2]. Immediately after prolapse, the tissues appear almost normal, but within few hours it becomes enlarged and oedematous. Some animals will develops hypovolemic shock, secondary to internal blood loss, laceration of the prolapsed organ or expulsion of abdominal viscera (Potter, 2008) [10]. The etiology of uterine prolapsed is unknown, but many factors have been associated with prolapse (Jackson, 2004 and Hanie, 2006) [3, 2]. The success of treatment depends on the type of case, the duration of the case, the degree of damage and contamination. This paper presents successful management of uterine prolapse in three postpartum does.

### Case history and observation

The three goats aged about 3 to 5 years were presented to the gynaecology clinics of Veterinary Clinical Complex, Bihar Veterinary College, Patna with complaints of postpartum uterine prolapse (Fig.1, 2 and 3). In the first case, two live kids were delivered at full term of gestation, one live foetus in second cases and in third case two dead foetuses were delivered in full term of gestation. All were showing the symptoms of continuous straining after delivery of foetus since from last 3 to 6 hours, thereafter they exhibited the eversion of uterus. On clinical examination, the animal was showing discomfort, restlessness with increased pulse and respiration rate and, normal rectal temperature (Table 1). 5 ml of blood was collected for hemato-biochemical analysis. The prolapsed mass was stained with faecal materials and debris. The prolapsed parts in case no 2 was lacerated due to mechanical trauma and exposed for since last 6 hours. Based on the clinical signs, the conditions were diagnosed as fourth degree uterine prolapse in all three cases.

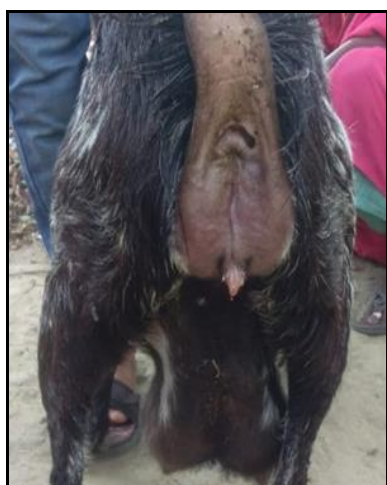
**Table 1:** Vital parameters (temperature, pulse and respiration) and hemato-biochemical estimation in affected goats (does)

Parameters	Case No. 1	Case No. 2	Case No. 3
Temperature (°F)	102.2	102.8	102.5
Pulse (rate/min)	80	102	86
Respiration (rate/min)	42	52	46
Hb (g/dl)	10.0	9.8	10.5
Calcium (mg/dl)	8.6	7.5	8.2

### Treatment and Discussion

The treatment started with the main objective of reduction, reposition and retention of prolapsed mass (Figure 4). The epidural anaesthesia was given with 2 ml of 2% lignocaine hydrochloride injecting at inter-sacrococcygeal space (Singh *et al.*, 2020) [8]. The prolapse mass of perineal area and vulva was gently washed with warm 1:1000 dilution of Potassium Permanganate solution and followed by moping with clean and dry cloth. The prolapsed mass was elevated upward to the level of an ischial arch to drain urine from bladder, and Popin spray<sup>®</sup> was applied where the prolapsed mass reduced in its size within 10-15 minutes. The reduced prolapse mass was treated with lignocaine gel along with Soframycin cream<sup>®</sup> on exposed parts. The reposition of the prolapsed mass was done by elevating the prolapsed mass to the level of the vulva and pushed inwards through the vagina in slightly downward angle, and simultaneously elevating the hindquarters of the animal. No vulval retention suture was applied. The does on the day of presentation were treated with injection dextrose normal saline (5%) 300 ml, intravenous, injection Conciplex<sup>®</sup>

@ 3 ml, intravenous, injection Calcium borogluconate 80-100 ml, slow intravenous, injection Oxytocin 10 I/U, intramuscular. Furthermore, injection Ceftriaxone (Intacef<sup>®</sup>) @ 10 mg /Kg body weight, intramuscular, injection meloxicam (Melonex<sup>®</sup>) @ 0.5 mg/ Kg body weight, intramuscular was administered for 5 days. Oral calcium (Calshakti<sup>®</sup>) @ 10 ml/animal with laxative diet was also advised for 10 days. There was uneventful recovery from condition without any complications in all three cases and reoccurrence was not noticed. The occurrence of uterine eversion in goat has previously been reported by Selvaraju *et al.* 2010 [11], Sing *et al.* 2011 [12] and Pasha *et al.* 2021 [9]. The prescribed treatments in the present case studies were in accordance with Nair *et al.* (2019) [4]. Superficial contamination should be carefully removed with warm diluted antiseptic solution, and epidural injection of lignocaine hydrochloride provides effective analgesia eliminating forceful abdominal straining (Oh and Shin, 2017) [7]. To avoid further abdominal strain and recurrence of prolapse, it is vital to completely reposition both uterine horns in either a standing or recumbent position (Hanie 2006 and Singh *et al.*, 2020) [2, 8]. The study showed that animals were having low level of calcium that can lead to uterine prolapse events (Abbas and Abed, 2021) [13], and uterine atony caused by low calcium levels can be treated with parenteral calcium borogluconate (Singh *et al.*, 2020) [8]. Precaution should be taken that prolapse uterine mass be gently handled and manipulated to minimise scope of tearing and haemorrhage following the technique of Nair *et al.* (2019) [4].

**Fig 1, 2 & 3:** Uterine prolapsed mass in affected does**Fig 4:** Reduction of prolapsed uterine mass

### Conclusion

It can be concluded that total uterine prolapse can be easily managed by timely intervention. The three interventions viz. reduction, reposition and retention of prolapse mass along with therapeutics (calcium magnesium borogluconate, oxytocin, 5% dextrose normal saline, antibiotics, anti-inflammatory and multivitamins) successfully managed the uterine prolapse in goats.

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### References

1. Arthur GH, Noakes DE, Pearson H. Veterinary Reproduction and Obstetrics. 6th ed. London, UK: ELBS,

- Bailliere Tindall; c1989. p. 175.
2. Hanie FA. Text Book of Large Animal Clinical Procedures for Veterinary Technicians. 3rd ed. Mosby, Elsevier; c2006. p. 218-221.
  3. Jackson PGG. Post parturient problems in large animals. In: Handbook of Veterinary Obstetrics. 2nd ed. Elsevier Saunders; c2004. p. 209-231.
  4. Nair SS, Khan S, Anuraj R, Jacob M. Management of Post-Partum Uterine Prolapse in Malabari Goats. *Int J Curr Microbiol App Sci.* 2019;8(5):2136-2140.
  5. Gupta S, Sharma A, Singh M. Post-Partum Uterine Eversion and its Management in A Doe: A Case Report. *Dairy and Vet Sci J.* 2018;8(2):555731. DOI: 10.19080/JDVS.2018.08.555731
  6. Noakes DE, Perkinsons TJ, England GCW. Postpartum Prolapsed of Uterus. *Veterinary Reproduction and Obstetrics.* Saunders; c2009. p. 322-33.
  7. Oh A, Shin ST. Uterine Prolapse in a Korean Black Goat. *J Vet Clinic.* 2017;34(4):307-309.
  8. Singh B, Singh KP, Kumar R, Singh SV, Husain S. Postpartum Uterine Prolapse in a Goat and its Successful Management. *Ind J Vet Sci Biotech.* 2020;16(1):73-74.
  9. Pasha MM, Venkanagouda D, Bijurkar RG, Malashri G. Successful management of uterine prolapse in a non-descriptive goat: A case report. *Pharma Innovation J.* 2021;10(12):93-94.
  10. Potter T. Prolapse of the uterus in the cow. *U.K Veterinary Journal.* 2008;13:1-3.
  11. Selvaraju M, Ravi kumar K, Palanisamy M, *et al.* Total uterine prolapse after abortion in a goat. *Indian J Field Vet.* 2010;5:73.
  12. Singh G, Pandey AK, Kumar R, Kumar S. Post-partum uterine prolapse in a goat - A case report. *Vet Pract.* 2011;12:192-193.
  13. Abbas MF, Abed FA. Most common risk factors of uterine prolapse in local goat breeds. *Biochem Cell Arch.* 2021;21:1987-1990.