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Successful clinical management of uterine prolapse in a postpartum goat

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Abstract
A 5-year-old non-descript doe was presented to the Veterinary Clinical Complex PGIVER Jaipur with a history of recent parturition followed by complete uterine prolapse. The animal had delivered a dead foetus in the morning, and shortly thereafter the uterus was observed hanging outside the vulva. Clinical examination revealed a congested but viable prolapsed uterine mass and rectal temperature of 100.4°F. The mass was thoroughly washed with 1% potassium permanganate solution, treated with povidone-iodine and cold application, and repositioned successfully. Supportive therapy including intravenous fluids, antibiotics, corticosteroid, calcium, oxytocin, and anti-inflammatory drugs was administered. The animal recovered uneventfully.

Keywords: Uterine prolapse, Goat, Postpartum, Oxytocin

Introduction
Postpartum uterine prolapse in goats is a rare but serious condition characterized by the complete eversion of the uterus, which turns inside out through the vagina shortly after kidding when the cervix remains open and the uterine tone is lost (Noakes *et al*., 2019; Hanie, 2006) [7, 5]. The prolapsed uterus is visible as a large, oedematous mass protruding from the vulva, often hanging below the hock, making it prone to injury and contamination (Poornima *et al*., 2025; Sahadev *et al*., 2014) [8, 10]. The etiology of uterine prolapse is multifactorial, involving poor uterine tone, excess traction during dystocia or removal of retained fetal membranes, uterine atony, hypocalcaemia, hormonal imbalances, mineral deficiencies, physical trauma, and high estrogenic feed intake especially in sheep (Roberts, 2024; Azad *et al*., 2024; Bhat *et al*., 2022) [9, 4, 2]. Excessive straining and prolonged labour contribute significantly to the condition (Sonu S. Nair *et al*., 2019; Coll-Roman *et al*., 2023) [6, 3]. Management revolves around the "three R's": reduction, reposition, and retention of the uterus. Treatment includes epidural anaesthesia to prevent straining, cleaning and reducing edema of the prolapsed uterus, gentle manual repositioning, and retention sutures such as Buhner's technique. Supportive therapy with calcium borogluconate, oxytocin, antibiotics, anti-inflammatory drugs, and vitamins improves uterine tone and prevents infections (Azad *et al*., 2024; Singh *et al*., 2018; Poornima *et al*., 2025) [4, 12, 8]. Timely intervention is critical to avoid complications like hemorrhage, necrosis, ischemia, and shock which worsen prognosis (Noakes *et al*., 2019) [7]. Overall, recent research consistently demonstrates that rapid diagnosis, prompt manual correction, and systemic supportive care substantially improve recovery and future fertility in postpartum goats with uterine prolapse.

Case History and Clinical Observation
5-year-old non-descript doe owned by Mr. Mohammad (Village Somel, Jaipur) was presented to the Veterinary Clinical Complex. The owner reported that the doe had delivered a dead fetus earlier in the morning. Soon after, a large uterine mass was noticed protruding from the vulva. On physical examination, the animal appeared dull and weak. Rectal temperature was recorded at 100.4°F. A large, edematous, and congested prolapsed uterine mass was found hanging outside the vulva but was viable.

Treatment

The prolapsed mass was thoroughly washed with 1% potassium permanganate ($KMnO_4$) solution to reduce contamination and edema. Povidone-iodine solution and cold application (ice pack) were used to reduce swelling and ensure asepsis. The uterus was gently repositioned into the pelvic cavity. Supportive treatment for postpartum uterine prolapse in goats involves multiple components to ensure recovery and prevent complications. Intravenous fluids such as normal saline (500 ml) and Ringer's lactate (500 ml) are administered to correct dehydration and restore electrolyte balance. Calcium borogluconate (100 ml I/V) helps manage hypocalcaemia and improve uterine tone, crucial for successful reduction of prolapse. Dexamethasone (4 ml I/V) is used to reduce shock and inflammation. Broad-spectrum antibiotics like ceftriaxone (1 g I/V) prevent secondary infections due to exposure of the prolapsed tissue. Vitamin B-complex injections like Inj. Bekom-L (5 ml (I/M), support metabolic status, while non-steroidal anti-inflammatory drugs (Inj. Melonex 5 ml I/M) provide pain relief and reduce inflammation. Oxytocin (5 ml I/V) promotes uterine contractions and involution, aiding recovery. Post-replacement, close monitoring is essential, with no recurrence observed in reported cases and progressive recovery noted. This protocol reflects a comprehensive approach combining fluid therapy, infection control, anti-inflammatory treatment, calcium supplementation, and hormonal support key factors in positive outcomes after uterine prolapse in goats.

Fig 1: Complete Eversion of Uterus in Goat

Fig 2: The prolapsed uterus hanging from the vulva

Fig 3: Application of ice-packs

Fig 4: Repositioning of uterus

Fig 5: After reposition of uterus

Discussion

The recent discussion on postpartum uterine prolapse in goats emphasizes the importance of timely and comprehensive clinical management to maximize recovery and preserve fertility. Azad *et al.* (2024) [4] reported successful treatment in three does using epidural anaesthesia with 2% lignocaine, enabling gentle manipulation for gradual uterine repositioning, along with potassium permanganate cleaning to reduce contamination. Supportive therapy involved calcium borogluconate for hypocalcaemia correction and uterine tone improvement, oxytocin for uterine contractions, ceftriaxone as an antibiotic, meloxicam for anti-inflammation, and multivitamins to enhance metabolic status. Singh *et al.* (2018) [12] and Nair *et al.* (2019) [6] also highlight the critical role of electrolyte balance and caution in avoiding excessive abdominal strain during treatment. Abbas and Abed (2021) [1] quantified the association between low calcium levels and increased prolapse risk. Mechanical facilitation by elevating the animal's hindquarters reduces visceral pressure, easing replacement (Velladurai *et al.*, 2016) [13]. Retention sutures like Buhner's technique are applied selectively when straining persists to prevent recurrence (Poornima *et al.*, 2025; Sharma *et al.*, 2018) [8, 11].

Conclusion

The prolapsed uterus was successfully replaced and the animal responded well to fluid therapy, supportive treatment, antibiotics, and oxytocin. Retention sutures like Buhner's technique are applied selectively when straining persists to prevent recurrence. Prognosis was considered favourable with advice for strict post-partum monitoring, balanced nutrition, and prevention of further straining.

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References-

1. Abbas MF, Abed FA. Most common risk factors of uterine prolapse in local goat breeds. Biochem Cell Arch. 2021;21:1987–90.
2. Bhat GR, Yousuf N, Parrah J. Management of cervico-vaginal and rectal prolapse in goat during advanced pregnancy. Indian J Anim Reprod. 2022;43(1).
3. Coll-Roman LM, Cabrera C, VanderBroek AR, Bauck AG, Kelleman AA, Pozor MA, *et al*. Multicenter study of uterine tears and other reproductive complications in periparturient goats presented to veterinary teaching hospitals. J Vet Intern Med. 2023;37(6):2623–30.
4. Azad CS, Sengupta D, Sheetal SK, Kumar A, Kumar A. Clinical management of postpartum uterine prolapse in goats. Int J Vet Sci Anim Husbandry. 2024;9(2):4–6.
5. Hanie EA. Prolapse of the vaginal and uterus. In: Textbook of Large Animal Clinical Procedures for Veterinary Technicians. St. Louis (MO): Elsevier Mosby; 2006.
6. Nair SS, Sharun K, Anuraj R, Mathew J. Management of post-partum uterine prolapse in Malabari goats. Int J Curr Microbiol App Sci. 2019;8(5):2136–40.
7. Noakes DE, Parkinson TJ, England GCW, editors. Veterinary Reproduction and Obstetrics. 10th ed. St. Louis: WB Saunders; 2019. p. 333–48.
8. Poornima, Pasha MM, Malasri G, Venkanagouda D, Bijurkar RG. Clinical management of post-partum uterine prolapse in a non-descript goat. Int J Adv Biochem Res. 2025;9(6S):436–8. doi:10.33545/26174693.2025.v9.i6Sf.4644.
9. Roberts JN. Uterine prolapse and eversion in animals. MSD Vet Man. 2024. Available from: https://www.msdvetmanual.com/reproductive-system/uterine-prolapse-and-eversion/uterine-prolapse-and-eversion-in-animals
10. Sahadev A, Suchitra BR, Renukaradhya GJ. Management of postpartum uterine eversion in a ewe. Intas Polivet. 2014;15(2):448–9.
11. Gupta S, Sharma A, Singh M. Post-partum uterine eversion and its management in a doe: a case report. Dairy Vet Sci J. 2018;8(2):555731. doi:10.19080/JDVS.2018.08.555731.
12. Singh KP, Singh B, Singh RV, Singh P, Singh SK. Management of post-partum uterine prolapse in a goat with vulval lip suture technique. Indian J Anim Health. 2018;57(2):225–8.
13. Velladurai C, Selvaraju M, Napolean RE. Postparturient total uterine prolapse and its management in a goat. Indian J Vet. 2016;93:60–1.