Short Communication

DOI: 10.48165/ijar.2025.46.01.19

The Indian Journal of Animal Reproduction
The official journal of the Indian Society
for Study of Animal Reproduction
Year 2025, Volume-46, Issue-1 (March)

ISSN 0970-2997 **(Print)**

ISSN 2583-7583 **(Online)**

Management of Pre-cervical Uterine Torsion in a Salem Black Goat

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ABSTRACT

Successful management of pre-cervical uterine torsion in a Salem Black goat by caesarean section was reported.

Keywords: Goat, pre-cervical torsion, caesarean section

How to cite: Vinayaga, S. K. J., Ruthrakumar, R., & Angusamy, S. (2025). Management of pre-cervical uterine torsion in a Salem Black goat.
The Indian Journal of Animal Reproduction, 46(1),99-100.10.48165/ijar.2025.46.01.19

INTRODUCTION

The twisting of the gravid uterus along its long axis is commonly referred to as uterine torsion. Most frequently, it happens in the first or second stage of labour or during the latter trimester of pregnancy. Small ruminants have a lower incidence of uterine torsion as a cause of dystocia than cattle and buffaloes. This is because goats frequently undergo bicornual pregnancies and because the mesometrium attaches sub-lumbarly rather than sub-ilially as cattle do (Sood *et al*., 2002). Uterine torsion is one of the maternal causes of dystocia. According to Ruthrakumar *et al.* (2023); Selvaraju and Karthick, (2020), uterine torsion is more common in cattle and buffalo, somewhat uncommon in sheep and goats, and exceedingly unusual in small animals. Scott (2011) states that pre-cervical uterine torsion is mistakenly detected in ewes or does with inadequate cervical dilation. (Saikumar, 2022; Savitha, *et al*., 2022) states that uterine torsion is more common in animals with a single foetus because of instability. Moreover, only during emergency slaughter, caesarean sections, or post-mortem investigations could pre-cervical torsion in sheep and goats be detected (Wehrend *et al.,* 2002). The present case discusses a doe's effective surgical therapy of dystocia due to pre-cervical uterine torsion.

CASE HISTORY AND OBSERVATION

A four years old full term pregnant Salem Black goat was presented with a history of impending parturition and intermittent abdominal straining since twenty-four hours with no progress in kidding. The animal was anorectic with reduced water intake. General examination of the animal showed an exhausted appearance and pale mucous membrane along with reduced temperature (99.8°

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Received ; 05.06.2024:Accepted 10.02.2025

F) and normal heart rate (92 bpm), respiratory rate (26) and colostrum appeared on milking. On abdominal palpation hard fetal structures were detected and on per vaginal examination completely closed external os was observed.

TREATMENT AND DISCUSSION

Fig.1: Pre-cervical uterine torsion on left side

Fig. 2 : Dead emphysematous male fetus

As it was a delayed case and to save the life of the dam, an emergency caesarean section (left flank approach) has been chosen. The animal was placed on right lateral recumbency and the surgical site on the left lower flank region was prepared by clipping the hair. An inverted "L" block using 2 % lignocaine was given locally as a local anaesthetic. Surgical area is scrubbed with 7.5 % povidone iodine solution. Laparotomy was performed in a routine manner to reach the gravid uterus. Then an incision was made on the dorsal curvature of the exteriorized gravid uterus avoiding the cotyledons. A dead emphysematous male fetus (fig.2) was removed along with the fetal membranes. The uterus was cleaned with a normal saline solution and the uterine incision was closed with cushing followed by a lembert suture pattern. After suturing the uterus, a detailed examination confirmed the pre-cervical uterine torsion on the left side (Fig.1). The uterus was viable and detorsion was performed intra- abdominally. The peritoneum was flushed with metronidazole solution and laparotomy incisions were closed in a regular manner. Postoperatively the doe was medicated with Inj. Ringer's Lactate (10 ml/kg i.v.) solution, Inj. Enrofloxacin (5 mg / kg i.m.,), Inj. Oxytocin (10 IU i.m.,), Inj. Meloxicam (0.5 mg/kg i.m.) for three consecutive days. After 10 days skin sutures were removed and povidone iodine ointment was applied.

When compared to cows, goats have an extremely low incidence of uterine torsion; the current case was only found out by abdominal cavity examination. Due to the small ruminants' incapacity to undergo a rectal examination, pre-cervical uterine torsion was tricky to diagnose. Nonetheless, post cervical torsion cases were readily identified by a vaginal examination using characteristic vaginal folds (Selvaraju *et al.,* 2020). Despite the use of appropriate detorsion techniques, viable foetuses could be retrieved from the instances. In order to diagnose and treat this obstetrical disease in goats, the site of torsion is crucial. Treatment options for uterine torsion in small ruminants include simple rotation, modified Schaffer's procedure, and laparohysterectomy (Selvaraju *et al.,* 2012; Periyannan *et al.,* 2021). However, in this instance, laparohysterectomy has been carried out in response to the uterus's modified echotexture, sparing the dam's life as recommended by Chhavi *et al.* (2021). Transrectal ultrasonography may be used to diagnose pre-cervical uterine torsion in small ruminants, according to Ruthrakumar *et al.* (2023).

CONCLUSION

Uterine torsion can be resolved by two procedures, non-surgically (simple rotation or Modified Schaffer's method) and surgically (caesarean section). In this case caesarean section was opted because it is the most reliable method in delayed cases. Early diagnosis and proper therapeutic approach resulted in good survivability of the dam.

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