Case report

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Successful Management of Left Sided Post-Cervical Uterine Torsion in Goat with Modified Schaffer's Method

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ABSTRACT

A non-descript doe with completion of gestation period, history of straining, restlessness and engorged udder was presented to the Teaching Veterinary Clinical Complex, College of Veterinary and Animal Sciences, Udgir. Per-vaginal examination revealed that the Goat has post-cervical left sided uterine torsion of more than 180°. The case was successfully handled with detortion of uterus by modified Schaffer's method. After detortion, the live female kid was delivered with gentle traction. An uneventful recovery was seen after detortion and therapeutic management in the doe.

Introduction

Uterine torsion is the rotation of uterus on its longitudinal, axis most commonly found in cattle and buffalo, rare in doe and ewe and seldom in mare, bitch and sow (Parkinson et al., 2019; Noakes et al., 2018; Purohit, 2006). Jackson (2004) reported that only 2% dystocia occur due to uterine torsion in the small ruminants because bi-cornual pregnancy and sub-lumbar attachment of mesometrium makes the uterus more stable and less prone to uterine torsion (Sood et al., 2002) compared to bovines where uni-cornual pregnancy, sub-ilial attachment of mesometrium pre-dispose to the condition of uterine torsion in the bovine (Roberts, 1971). The general management for the uterine torsion includes rolling of dam while giving pressure on flank (Dhaliwal et al., 1986) and caesarean section (Bansod and Srivastava, 1991) especially when other obstetrical procedures are failed to deliver the fetus. The modified Schaffer's method is used routinely in bovines to correct the uterine torsion; however, its application is very in small ruminants. In this case left sided post-cervical, uterine torsion was corrected by adopting modified Schaffer's (Plank-on Flank) method and successful per vaginal delivery of live a kid.

Case history and observations

A 3 years old non-descript doe in her 2nd parity was presented in the Teaching Veterinary Clinical Complex, College of Veterinary and Animal Sciences, Udgir with the history of completion of gestation period, straining and restless since early morning. Abdominal palpation revealed

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the presence of a fetus inside the uterus. Clinically, the doe was dull and depressed with irregular straining. The udder of the doe was engorged and the vulval lips were slightly swollen with no vaginal discharge. Per-vaginal examination revealed a strong twist (>180°) in the anterior vagina running towards left side. Hence, the case was diagnosed as left side post-cervical uterine torsion.

Treatment and discussion

The animal was cast on left lateral recumbency and both the forelegs and hind legs tied separately. A wooden plank (60 cm×40 cm×4 cm) was placed over the flank region in order to fix the uterus externally. A gentle pressure was applied on the abdomen with the help of wooden plank and the goat was slowly rolled towards the same side of the torsion. After the first roll, the cervical plug came out of the vagina and cervix was easily palpated, still mild torsion was left which was corrected in second rolling. The fetus was presenting an anterior longitudinal presentation with dorso-sacral position. Live kid was delivered with gentle traction. A doe was re-examined for the presence of twin or triplet pregnancy. No other fetus was present in the uterus.

After successful detortion, the doe was treated with Inj. Tranexamic acid @ 10 mg/kg, Inj. Meloxicam @ 0.5 mg/kg, and Inj. Enrofloxacin @ 2.5 mg/kg, I/M. Two Ecbolic boluses of urea and metronidazole were placed intrauterine. Inj. Meloxicam and Enrofloxacin were advised to continue for next 2 days. Placenta was oozing out within 4 hrs after the delivery of the fetus. An uneventful recovery was seen after detorsion and the treatment after three days.

Fig. 1. Examination of doe per-vaginum to detect the torsion (A), restraining of animal on left lateral recumbent (B), rotation of animal by applying gentle pressure with flank on abdomen (C), Hanging cervical mucus after detorsion (D), fetal position after obstetrical manipulation (E), a healthy doe and the kid (F).

Uterine torsion is very rare in goat (Gupta, 2005) due to bi-cornual pregnancy and sub-lumbar attachment of mesometrium (Sood et al., 2002). However, in the present case uni-cornual pregnancy made the doe more prone the uterine torsion (Braun, 1997). Modified Schaffer's method is one of the most reliable method fordetortionmost likely in bovine and also in caprine (Raja et al., 2013; Patil, 2019; Dalal et al., 2022). The present case was successfully managed by modified Schaffer's method using wooden plank (dimension 60cm×40cm×4cm) and therapeutic intervention.

Conflict of interest

Authors declare none

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