



Schaffer's Method of Detorsion and Delivery of Triplets in a Non-Descript Goat

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ABSTRACT

A non-descript doe was presented with a history of full-term pregnancy and abdominal straining. Clinical examination revealed a narrowing of the birth canal and twist of vaginal wall towards the clockwise direction, and the case was diagnosed as right side post cervical uterine torsion. Schaffer's method of detorsion was attempted and two dead female fetuses along with a live female fetus were relieved. The doe was treated with antibiotics and other supportive therapy for two days. The animal showed an uneventful recovery.

Key words: Non-descript doe, Post-cervical torsion, Schaffer's method.

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INTRODUCTION

Uterine torsion also known as “uterine volvulus” or “torsion uteri” is one of the types of uterine displacements. It is defined as the rotation of the uterus along its longitudinal axis with twisting of the anterior vagina (Arthur *et al.*, 1975). It is one of the maternal factors which accounts for the occurrence of dystocia, and it varies widely ranging from 45° to 360° (Jackson *et al.*, 2004). This condition is less common in goats when compared to bovines and could be attributed to anatomical attachment of mesome-

trium with sub-lumbar region rather than sub-iliac as in cattle (Frazer *et al.*, 1996). The present communication reports a successful management of uterine torsion with triplets in a non-descriptive goat by Schaffer's method.

CASE HISTORY AND OBSERVATIONS

A non-descript doe at third parity was presented to the Obstetrics unit of Veterinary Clinical Complex, Veterinary

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College and Research Institute, Orathanadu with a history of full-term pregnancy and abdominal straining since the previous day with no progress. General clinical examination revealed that the animal was restless, and depressed along with a normal rectal temperature (101.4°F). Colic signs such as pawing and flank watching were exhibited (Fig.1).



Fig. 1. Animal exhibiting colic sign-pawing

External examination of genitalia showed an edematous vulva, pinkish moist vulval mucous membrane along with serosanguinous vaginal discharge. Per vaginal digital examination revealed narrowing of birth canal and spinning of the anterior vagina towards the right side. On vaginal speculum examination cervix was not visualized, twisting of vaginal wall towards right side was evident which led to confirmation of clockwise post cervical uterine torsion (90°).

TREATMENT AND DISCUSSION

The animal was casted in right lateral recumbency. A wooden plank of about three feet length, 5.5 inch breadth and one inch thickness was placed on the abdomen midway between the last rib and hip bone. The lower end of the plank was held tightly on the ground and gentle pressure was applied over the middle of the plank using hands to ensure fixation of the uterus (Fig. 2).



Fig. 2. Schaffer's method of detorsion

Both the forelimbs and hindlimbs were held separately and rolled in the same direction as that of the torsion (right side). Gushing out of fetal fluids was noticed indicative of detorsion. Further per vaginal examination revealed patency of birth canal. The cervix was relaxed (two finger dilatation) and fetal parts were palpable, however complete cervical dilatation was not achieved. The animal was induced with Inj. Oxytocin (5 IU) mixed along with Inj. Dextrose normal saline (200ml I/V). After 20 minutes of intervention, cervical dilatation was ensured which resulted in delivery of two dead and a live female fetus was delivered by gentle traction. The dead fetuses were in anterior presentation while the third fetus (live) was in posterior presentation. The animal was further treated with the antibiotic (Inj. Enrofloxacin @ 100mg I/M), anti-inflammatory (Inj. Flunixin @ 20 mg, I/M), anti-histamine (Inj. Chlorpheniramine maleate @ 10mg I/M) for two days and oral ecbolics was prescribed. The condition of the animal improved which was determined by normal feed intake and absence of vaginal discharge.

Uterine torsion is more common in animals with a single fetus because of instability. However, in this case, it may be due to the unequal distribution of fetuses in both horns. The closed confinement of animals during the gestation period may predispose them to torsion. Schaffer's method of detorsion remains the best technique for relieving torsion cases (Balasubramaniyan *et al.*, 2013) as it requires minimal assistance. In severe degree torsion and delayed cases, immediate surgical intervention (cesarean section) is shown to have a good prognosis over conventional techniques (Bansod and Srivastava, 1991). The fetal death and subsequent emphysema is a common complication observed in uterine torsion. Placental separation plays a major role in determining the viability of fetus. If the placental separation occurs before onset of second stage of parturition, it will increase the chances of getting non-viable fetus. In spite of innate stress management in twin fetuses (Schmidt *et al.*, 1996) the circulatory demand is compromised by increased number of fetuses and also by uterine torsion which in turn decides the viability. In present case, the viability of the third fetus might be attributed to uninterrupted blood supply while the other two dead fetuses would have received relatively less blood supply.

CONCLUSIONS

In conclusion, proper diagnosis and timely intervention aids in successful management of post cervical uterine torsion in goats.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

Arthur, G.H. (1975). Veterinary Reproduction and Obstetrics, 4th Edition, Williams and Wilkins Co., Baltimore, MD. pp 238.

- Balasubramaniyan, S., Sathiyamurthy, T., Raja. S. and Manokaran, S. (2013). Successful nonsurgical correction method for uterine torsion in goats. *Ind. J. Field Vet.*, **9**: 71-72
- Bansod, R.S. and Srivastava, A.K. (1991). Uterine torsion in a goat. *Ind. J. Anim. Reprod.*, **12**(1): 106-107.
- Frazer, G.S., Perkins, N.R. and Constable, P.D. (1996). Bovine uterine torsion: 164 hospital referral Cases. *Theriogenology*, **46**: 739-758.
- Jackson, P.G.G. (2004). Hand book of veterinary obstetrics. W.B. Saunders Co. Philadelphia. pp.5.
- Schmidt, M., Greve, T., Avery, B., Beckers, J.F., Sulon, J. and Hansen, H.B. (1996). Pregnancies, calves and calf viability after transfer of in vitro produced bovine embryos. *Theriogenology.*, **46**: 527-529.