

Case Report

Successful Uterine Detorsion and its Therapeutic Management in a Doe

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ABSTRACT

The present case describes successful uterine detorsion and its therapeutic management in a non-descript goat.

Keywords: Doe, Dystocia, Uterine torsion, rolling, detorsion

Uterine torsion is defined as rotation of gravid uterus on its long axis (Roberts, 1986a). Uterine torsion may be of varying degree i.e. from 45 ° - 180° or even more. It may occur in all species of animals but seen most commonly in dairy cattle and occasionally in sheep (Noakes *et al.* 2001). In small ruminants, maternal dystocia due to uterine torsion is occasional and accounts for 2% of etiological factors (Jackson, 2004). Most torsion occurs during the later phase of first stage or the early phase of second stage of parturition (Roberts, 1986a). The incidence of uterine torsion is very rare in the goat due to frequent bicornual pregnancy (Sood *et al.* 2002) and mainly occurs because of immediate predisposing factors like sudden falling and rolling, lack of exercise during gestation (Bowen, 1981), loss of fluids (Roberts, 1986a). It may be due to single fetus in monocornual pregnancy (Yadav *et al.* 2018). In the present case, uterine torsion was corrected by rolling of doe and subsequent per-vaginal delivery of the fetus following little obstetrical maneuvering.

A non-descript doe with full term pregnancy was presented to Veterinary Clinical Complex (VCC),

Warangal. Doe was dull, anorexic since one day and was restless with normal rectal temperature - 102.1°F, Heart rate - 121 bpm, conjunctival and buccal mucous membranes were pale pink. On per-vaginal examination, cervix was palpable with incomplete dilation and the birth canal was oedematous with twisted vaginal folds running spirally downward and forward to the left side indicating 'left side pre-cervical uterine torsion'.

The doe was casted on the left lateral recumbency and both forelimbs and hindlimbs were held separately. Caudal epidural anaesthesia [Inj. Lignocaine hydrochloride (2%), 2ml] was administered at sacro-coccygeal space. To induce cervical dilation, Inj. Epidosin (Valethamate bromide) -30 mg (3 ml, I/M) was administered along with Inj. Textableed (Tranexamic acid) - 400 mg (4 ml, I/M) to prevent blood loss. Then, the animal was rolled on to left-

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side (in the direction of torsion) for 5 to 6 rotations to detort the uterus while grasping the cervical folds per-vaginally for stabilization and observed for cervical dilation. Each rolling was accomplished in co-ordinated manner towards the left side so that both the forelimbs and hind limbs were brought to the left side simultaneously. Mild cervical dilation was palpated and the fetus was fixed by fingers per-vaginally along with rolling of the doe to relieve torsion. Per-vaginal examination was done to access the improvement in the condition after each rolling by palpation of cervix while simultaneously relieving the vaginal folds. After nearly 15 rollings of the animal, there were no twists per-vaginally indicating uterine detorsion and complete cervical dilation was achieved along with palpable fetal sac. Dead fetus was successfully relieved (Fig. 1) by applying traction as it was in anterior longitudinal presentation. Birth canal was examined for the presence of another fetus, but no fetus was palpable.



Fig. 1: Dead fetus relieved after Uterine Detorsion

Exapar bolus (Uterine cleanser and Restorative) was inserted intrauterinely for early expulsion of the placenta. Animal was successfully treated with Antibiotic, Inj. Intacef (Ceftriaxone) - 350 mg, I/M and anti-inflammatory therapy, Inj. Melonex (meloxicam) -10 mg I/M along with supportive therapy for a duration of three days to prevent secondary bacterial infection. Hind quarters of the doe was washed thoroughly with Potassium permanganate solution and the Doe (Fig. 2) recovered uneventfully without any complications. Rolling is indicated if dam is recumbent and the fetus is not approachable due to severity of torsion

or if torsion has occurred before expected time of parturition (Roberts, 1986b).



Fig. 2: Doe after successful uterine detorsion and per-vaginal delivery of dead fetus

In the present case as per the owner's history, doe completed full term pregnancy and showed no signs of parturition indicating the probability of its occurrence before expected time of parturition. Moreover, Bansod and Srivastava, (1991) suggested rolling of the dam for uterine detorsion after stabilization of the caudal portion of vaginal folds which was followed in the present case and doe was rolled in a similar way to relieve torsion. In the present case, fetus was successfully relieved without use of abdominal plank (Schaffer's method) as in case of bovine uterine torsion.

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