Clinical Management of Post-cervical Uterine Torsion in a Cow

S. Prakash¹, M. Selvaraju² and K. Ravikumar³
Department of Clinics
Teaching Veterinary Clinical Complex
Veterinary College and Research Institute
Tamil Nadu Veterinary and Animal Sciences University (TANUVAS)
Namakkal - 637002 (Tamil Nadu)

Abstract
Post-cervical right side uterine torsion in a Hallikar cow was treated successfully by adopting Schaffer’s detorsion method and cow delivered a live healthy male calf.

Keywords: Cow; schaffer’s method; uterine torsion

Introduction
Uterine torsion has been reported as a serious cause of dystocia in cattle and buffalo threatening lives of fetus and dam (Amin, 2011). It is the single most important malady among parturient bovines with high dam mortality rate (Matharu and Prabhakar, 2001). However, occurrence of uterine torsion in indigenous cattle is rare (Prabhakar et al., 1994). The present report records on postcervical right side uterine torsion and its successful management in a Hallikar cow.

History and Observations
A pluriparous full term pregnant Hallikar cow was presented with history of restlessness and mild straining for past 6 hours. The animal had normal rectal temperature with rapid pulse and respiration rates. The vaginal mucosa and vulval lips were edematous and congested. Vaginal examination revealed post-cervical right side uterine torsion of more than 180 degree.

Obstetrical Management and Discussion
The cow was casted in right lateral recumbent position with both fore and hind limbs tied separately (Fig.1) and detorsion was done by Schaffer’s method of rotation in same direction (Fig. 2). The vaginal passage of animal was examined after each rotation to find out whether detorsion was effective. After completion of two complete rotations, fetal fluids gushed out of uterus and cervix was fully dilated and fetal parts were easily palpable. Then snares were applied on both extended fore limbs. Traction was applied on fore limbs along with head after lubricating birth canal with obstetrical gel. A live male fetus was delivered by simple traction. The cow expelled placenta normally within 8 hours of fetal delivery.

Fig.1: Restraining of animal for detorsion
Fig. 2: Detorsion in process

Post obstetrically, the cow was administered with Inj. Calcium borogluconate (Mifexa) 450 ml, Inj. 20% Dextrose (Intalyteb) 3 liters and Inj. Oxytocin (Pitocin) 30 IU intravenously followed by Inj.
Post-cervical uterine torsion in cow

Ceftriaxone and Tazobactum (Intacef Tazobactum) 4.5 gm and Inj. Chlorphenaramine maleate (Anistamin) 12 ml intamuscularly.

Discussion

A number of concepts exist for explaining predisposition of bovine uterus to torsion however, maternal and fetal destabilizing factors behind occurrence of uterine torsion are not well understood (Schönfelder and Sobiraj 2005). Stall fed and not pastured bovines are proposed to be more prone to uterine torsion (Agarwal 1987). Frazer et al. (1996) recorded 63-69% calves from torsion affected dam are male, whereas others record 55-66% as female (Vasishta 1983). In the present case, the fetus was also male.

Occurrence of torsion of uterus is stressful event as revealed by huge increase in plasma cortisol which increases further by 15-30% following detorsion of uterus through rolling of dam (Amer and Hashem 2008). Similar to present case, about 66-96% torsions are post-cervical in which twist of rotated uterus extends caudal to cervix and involves anterior vagina in rotation (Aubry et al., 2008). Rotation of uterus is predominantly towards right in Bos indicus cattle 83% (Prabhakar et al., 1994 and Prasad et al., 2000), crossbred cattle 79% (Singla et al., 1992) and Bubalus bubalis buffaloes 95-98% (Vasishta 1983; Prabhakar et al., 1994 and Srinivas et al., 2007). In the present case, successful management of right-sided postcervical uterine torsion of more than 180 degree with delivery of live male foetus by traction in Hallikar cow (Bos indicus cattle) was achieved.

References


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A1 and A2 Milk

A1 milk is from Holstein Friesian and European cows with Histidine at 67th position of DNA, whereas A2 milk is from original pure indigenous breeds of cows which show Proline at 67th position of DNA and is same as human milk. The milk from Zebu, Jersey, Guernsey, Iceland cows, yalk, sheep and goat containing high level of beta casein A2 variant have lower incidence of cardiovascular diseases and type 1 diabetes.