

Case Study

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Management of Pre-Cervical Uterine Torsion in a Cow-Short Communications

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ABSTRACT

Pre cervical right side uterine torsion in a non-descript (ND) cow was treated successfully by modified Schaffer's method and cow delivered a live female calf.

Introduction

Uterine torsion is the rotation of a pregnant uterus on its longitudinal axis, which leads to narrowing of the birth canal, causing dystocia. In bovine, it is a common major cause of bovine dystocia (Jeengar *et al.*, 2015). It is categorized into left or right torsion according to the direction of rotation; mild, moderate or severe on the basis of degree and pre-cervical or post-cervical in terms of position (Amer *et al.*, 2008). Cows are thought to be more susceptible to uterine torsion than many other domestic animals due to their uterine instability resulting from the broad ligament attachments (Sloss and Dufty, 1980). It has also been considered that the way the cow stands up from lying in sternal recumbency may contribute to the occurrence of torsion (Noakes *et al.*, 2009b). The routine treatment is

rotating the uterus back into its physiological position. Direct and indirect methods of re-torsion are available and used in accordance with the conditions of clinical cases, in order to deliver the calf through vaginal delivery or caesarean section (Erteld *et al.*, 2014). The surgical treatment of uterine torsion by caesarean section presents numerous inconveniences, including risk of infection, damage to the internal organs and bleeding, as well as needing more time for recovery. Hence, the non-surgical treatment by the "rolling method" is one of the most popular methods of detorsion (Noakes *et al.*, 2001a).

Case History and Clinical Observations

A primiparous 5 yrs Jersey cross breed cow which completed gestation period of 280 days with no premonitory signs of parturition with

absence of relaxation of sacrosciatic ligament and failure of mammary gland development as per gestational stage was presented for treatment. the owner who got the cow examined by a local veterinarian with diagnosis of uterine torsion, who referred the animal to V. C.C., Mhow for management, the cow was brought to V. C. C., Mhow where a pre cervical right side uterine torsion was diagnosed by rectal palpation confirmed.

Treatment and Discussion

The cow was casted in right lateral recumbency with both fore and hind limbs are tied separately and detorsion was done by modified schaffer's method of rotation in same direction. the vaginal passage were examined after each rotation to check whether detorsion occur.after two rotation water bags comes out from uterus and cervix was fully dilated and fetal part and fetal head were palpable. the snares was applied on both fore limbs. Mild traction was applied on both fore limb and head. a live female calf was delivered by simple traction. the cow was administered with inj. Calcium Borogluconate (Mifex) 200 ml S/c and 250 ml slow I/ V, Inj. DNS – 3 liter, Inj. Dexamethasone – 15 ml, Inj. Ceftriaxone and Tazobactam (Intacef Tazo) – 3 gm, and Bolus Oxytetracycline – 4 bolus I/ U foe 3 days.

Uterine torsion is a common condition causing dystocia in bovines. simple twisting is easily corrected under field conditions, but some cases referred to special clinics tend to represent the more extreme form of condition (Arthur *et al.*, 1989). The degree of uterine torsion is considered as the emergency and surgery should be done as early as possible. It is necessary to evaluate the patient for their general health condition before starting the treatment, particularly the angle of twisting must be recognized. (Purohit *et al.*, 2011).

Uterine torsion is stressful event as revealed by increased plasma cortisol concentration which increases further by 15-30% following detorsion of uterus through rolling of dam (Amer and Hashem 2008). Our finding are correlated with Prakash *et al.*, 2014 and Bai *et al.*, 2016.

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