

Dystocia due to Post-Cervical Uterine Torsion along with Foetal Ascites in a Crossbred Holstein-Friesian Cow

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Ind J Vet Sci and Biotech (2022): 10.48165/ijvsbt.18.5.30

A twisting or rolling of the uterus along its longitudinal axis is known as uterine torsion (Roberts, 2004). Compared to other domestic animal species, bovines have a significantly higher prevalence of dystocia (Dutt *et al.*, 2021). Uterine torsion is one of the common causes of dystocia in buffaloes than in cows (Purohit *et al.*, 2011). In dairy cattle frequency of right horn pregnancy is reported as 60% to 68%, counterclockwise torsion would then be detected primarily in cases of right horn pregnancy (Arthur *et al.*, 1996). Blockage of lymphatics, excessive production or inadequate drainage of peritoneal fluid and other factors can result in foetal ascites (Sloss and Duffy, 1980). Additionally, dropsical conditions of foetus such as hydrocephalus, ascites, hydrothorax, and foetal anasarca can also result in dystocia (Purohit *et al.*, 2006; and *et al.*, 2012). The management of dystocia caused by left side post-cervical torsion and foetal ascites is described in the current case study. The patient was successfully treated without any complications.

CASE HISTORY AND OBSERVATIONS

A nine-month pregnant 6-year-old pluriparous HF crossbred cow was brought to the Veterinary Clinical Complex, Mhow, with the history of straining for the last 6 h. The dorsal vulvar commissure of the cow had a slight leftward twist (Fig. 1), the dam continued to strain through the second stage of labour, but no progress was seen. Per vaginam examination revealed post-cervical left side torsion. The cervix was one finger open and had a firm consistency. It was decided to attempt detorsion with Sharma's modified Schaffer's method to relieve the torsion.

TREATMENT AND DISCUSSION

To avoid excessive straining, epidural anesthesia with 2% lignocaine HCl was administered. The cow was cast on the left side as the direction of torsion. The fore legs and hind legs were tied apart in the same manner. A 12 feet long and 8 inches wide wooden plank was placed over the abdomen and was pressed by an attendant, while the other end of plank was fixed on the ground and an assistant stood on it, and the cow was slowly rolled in the same direction of the torsion. Per vaginam examination following three rolling revealed that the torsion was resolved. Partial fetal adjustments were

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How to cite this article: Sharma, P., Mahour, S. S., Parihar, A. S., Sankhla, S., & Khushwah, N. (2022). Dystocia due to Post-Cervical Uterine Torsion along with Foetal Ascites in a Crossbred Holstein-Friesian Cow. *Ind J Vet Sci and Biotech*. 18(5), 140-141.

Source of support: None

Conflict of interest: None

Submitted: 25/08/2022 **Accepted:** 29/10/2022 **Published:** 10/11/2022

made to retract the fetus from the birth canal and a dead foetus was delivered by forced traction (Fig. 2). The foetus was large in size with a severely distended abdomen that fluctuated on pressure indicating the presence of copious fluid. Following postmortem, it was determined that the foetus had ascites (Fig. 3).

After successful delivery the animal was treated with Inj. Ceftiofur sodium 1 gm, Inj. Oxytocin 75 IU in 1 L of normal saline IV, Inj. Dexamethsone 10 mL, Inj Dextrose 5% 3-L, Inj. Calcium-magnesium-boro-gluconate 450 mL slow IV, and Inj. Flunixin meglumine 15 mL IM. The treatment was continued for 5 days excluding Inj. Oxytocin and Inj. Calcium-magnesium-boro-gluconate. The animal recovered without any post-partum complication.

Occurrence of uterine torsion in indigenous cattle is rare (Prabhakar *et al.*, 1994). The dam survivability is high with rolling but comparatively lower with Cesarean section because of poor patient condition and more post-operative complications (Prabhakar *et al.*, 1997). According to Roberts (2004) foetal ascites (excessive buildup of fluid in the peritoneal cavity), which can be caused by foetal liver lesions, general venous congestion, or urinary blockage with or without foetal bladder rupture, is a rare cause of dystocia in several species, but is most common in cows (Arthur *et al.*, 2009). Dutt *et al.* (2018) observed similar occurrences of foetal ascites in buffaloes.



Fig. 1: Slight leftward twisted dorsal vulvar commissure



Fig. 2: Ascitic dead foetus

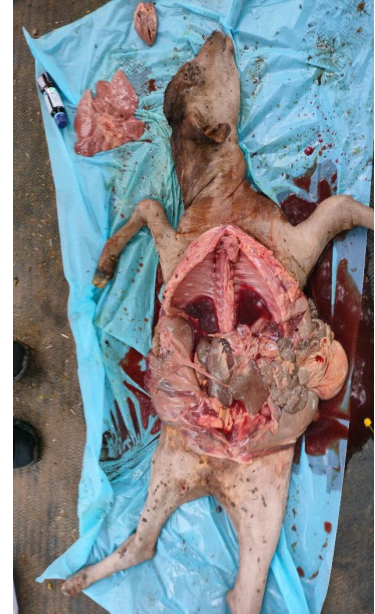


Fig. 3: Ascites fluid escapes from the peritoneal cavity

ACKNOWLEDGMENT

The author would like to express gratitude to the Dean, College of Veterinary Science and Animal Husbandry, Mhow (Madhya Pradesh) for providing funds and necessary support.

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