CASE REPORT

History A full term pregnant HF crossbred cow at its third parity was presented to Upazilla veterinary surgeon while visiting a dairy farm (Rahim Dairy Farm) at Laksam Upazilla with the history of restlessness, anorexia, excessive straining and showing no progress of parturition for last 16 hours.

Observations The animal had normal rectal temperature with rapid pulse and respiration rates. The vaginal mucosa and vulval lips were edematous and congested. Per vaginal examination revealed post-cervical left sided uterine torsion of around 360^0 (Fig. 1-A). Upon rectal palpation, it was revealed that the fetus was dead; however, the dam might survive if detorsion were done immediately.

Correction of Torsion The animal was cast on left lateral recumbency (Fig. 1-B). In order to protect the animals from skin and bone damage, a soft jute bag was placed beneath the body. Both forelegs were tied together at the ankle by rope and the hind legs were stretched behind the hypogastrium (Fig. 1-B). The direction of uterine torsion was confirmed by internal examination (Fig. 1-A). "Ball rolling" was performed in the same direction with a quick jerk. A veterinary practitioner, an intern vet and five farm workers were involved to roll the animal to 360^0 (Fig. 1-C, D, E) of which four persons assisted in rolling the animal by pushing its hind legs and keeping them behind the hypogastrium naturally and two persons assisted rolling the parturient cow by pulling the rope tied to the forelegs. During this process one person was involved in protecting the cow's head from injury (Fig. 1-C). The animal was evaluated by vaginal examination after the rolling to confirm the torsion correction (Fig. 1-F). As the torsion was not completely corrected, the process was repeated. After second rolling, uterine fluid gushed out and a complete detorsion was confirmed by per vaginal examination. Fetus could be palpated through dilated cervix. The fetus was in the normal anterior longitudinal presentation with slight lateral deviation of head and neck. The postural defects were corrected through mutation technique. Forelimbs were tied over the fetlock joint with the help of

snare and a dead fetus was delivered with the help of forced traction. The placenta was expelled normally after four hours.

Treatment Following delivery, five Renamycin® boli (Oxytetracyclin 500mg) intrauterine, single doses of 4 L 5% DNS and 450 ml Cal-D-Mag® was administered intravenously. A course of parenteral antibiotic i.e. 10 mg SP vet® (Streptomycin and Penicillin) was given with painkiller i.e. 15mL Kop vet® (Ketoprofen) and antihistaminic i.e. 20 mL Asta vet® (Antihistaminic). The animal was found completely normal just after three days of treatment.

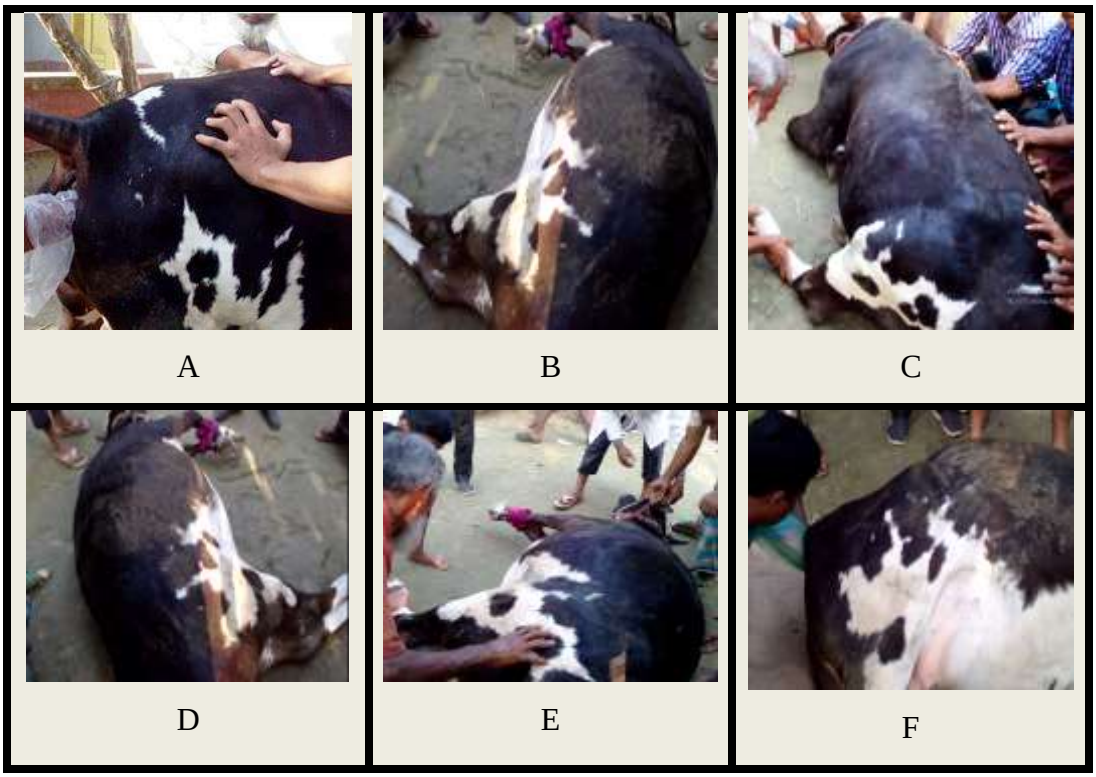

Fig: 1- A. Per vaginal Palpation for diagnosis of torsion

B. Casting of animal in lateral recumbency, Fore legs tied, hind legs stretched

C. Rolling of animal begins, Cows head protected by holding

D. Rolling continues, 180^0 rolled.

E. First Rolling 360^0 Completed.

F. Per Vaginal palpation to know after rolling to know the status of torsion

CONCLUSION

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). Small quantity of fetal fluids and associated decrease in size of uterus at the end of pregnancy seems to be a realistic justification for the occurrence of uterine torsion. Destabilizing factors such as weak broad ligament musculature, lower tone of uterine muscles along with sudden movements of dam and fetus can further add up to increase the probability of occurrence for uterine torsion.

Death of the fetus in the present case may be due to the delay in consultation to clinic, resulting in lack of blood supply to the uterus due to torsion and subsequent hypoxia (Noakes *et al.,* 2009). In the present case, successful management of left-sided post cervical uterine torsion of around 360^0 with delivery of dead male fetus by traction in HF Crossbred was achieved. The recovery of animal was occurred within three days of treatment maintaining the normal feed habit with milk production.

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