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Uterine torsion associated with posterior longitudinal presentation and lumbo-sacral position of the fetus in a buffalo

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Abstract
A 7 years old buffalo in its 4th parity was presented to Referral Veterinary Polyclinic with the history of completed gestation, inappetance and unable to proceed into calving inspite of straining and discomfort for the last 24-30 hours. The per-vaginal examination revealed post-cervical, right sided (clock-wise) uterine torsion greater than 180˚ but, lesser than 360°. Animal was casted in right lateral recumbency and detorsion attempt was made by modified schaffer's method and after two rolls, torsion was relieved. Cervix was opened as revealed by per-vaginal examination and fetal disposition was checked. Fetus was in posterior longitudinal presentation, lumbo-sacral position with both hindlimbs extended in the birth canal as sole of the hooves was palpable, confirmed by palpating tail and anus of fetus and no fetal reflex was felt when finger was put in anus. However, with the help of obstetrical rope and hook, forced extraction was applied and a dead male fetus was extracted out. The animal was discharged on the same day after the treatment.

Keywords: Buffalo, uterine torsion, fetal maldisposition, posterior longitudinal presentation

Introduction
Uterine torsion is the spiral twisting of the pregnant uterus on its longitudinal axis [1]. It has been reported in various species like cattle [2], buffalo [3], doe [4], ewe [5], llama [6], camel [7], mare [8], bitch [9] and queen [10] with maximum reports in cattle and buffaloes. The anatomical differences of genital structures and alignment of pregnant uterus on pelvic brim predispose cattle and buffaloes to uterine torsion [11]. Cervix is found to be partially or completely dilated immediately after the correction of torsion due to its association with process of parturition i.e. late 1st stage or early 2nd stage of labor [12]. Uterine torsion is the single most common cause of maternal causes of dystocia and reported to be more common in the buffaloes [3, 13]. Direction of torsion can be either in clockwise (right sided) or in anticlockwise (left sided) direction. It can be either pre-cervical (cranial to the cervix) or post-cervical (caudal to the cervix) with the most reported occurrence of post-cervical right sided uterine torsions in buffaloes [14]. Correction is done by rolling the animal while uterus is fixed by either plank method (>180˚ torsion) or by grasping cervical folds and fetal parts per-vaginal if accessible (<180˚ torsion).
Fetal maldisposition as fetal cause of dystocia is the abnormal presentation, position or posture of fetus often associated with uterine torsion generally occur due to weak, succumb or dead fetus which cannot exhibit righting reflex or normal disposition. Fetal death in delayed cases of uterine torsion or when degree of torsion is greater is mostly due to compromised blood supply to the fetus.

History and Clinical Examination
A 7 years old buffalo in its 4th parity was presented to the Veterinary Gynaecology and Obstetrics section of the Referral Veterinary Polyclinic (Indian Veterinary Research Institute, Izatnagar) with the history of completed gestation, inappetance and unable to proceed into calving inspite of straining and discomfort for the last 24-30 hours. The animal was in good body condition and gross observation revealed relaxation of sacro-sciatic ligaments, relaxation of perineum, vulva along with teat engorgement and udder enlargement. The per-vaginal examination revealed post-cervical, right sided (clock-wise) uterine torsion greater than 180˚ but, lesser than 360˚ and cervical so was not palpable.

Obstetrical and therapeutic management

Animal was casted in right lateral recumbency and both forelimbs and hind limbs were tied with a rope separately. Torsion was corrected by modified schaffer's method with the application of plank and after two rolls in the right direction, torsion was relieved. After detorsion, cervix was soft, pliable and opened as revealed by per-vaginal examination and fetal disposition was checked. Fetus was in posterior longitudinal presentation, lumbo-sacral position (Fig. 2) with both hindlimbs extended in the birth canal as sole of the fetal hooves was palpable, later confirmed by palpating tail and anus of fetus and no fetal reflex was felt when finger was put in anus. However, anal hook was placed in anus and both hindlimbs of the fetus were tied with obstetrical ropes separately above the fetlock (Fig. 1). Then, three point tractions were applied and a dead male fetus was extracted out (Fig. 2). Later, Enrofloxacin (Fortivir®, Virbac, India) 30 mL IM once; and Melaxicam (Melonex®, Intas Pharmaceuticals Ltd, India) 10 mL IM *sid* for 3 days were administered. To facilitate expulsion of fetal membranes, oral herbal uterine cleanser Uterotone® (Cattle remedies, India) 100 ml P.O. *bid* for 5 days was prescribed.

Fig 1: Application of obstetrical rope on fetal hindlimbs above the fetlock

Fig 2: Posterior longitudinal presentation and lumbo-sacral position of the fetus

Discussion

Both uterine torsion and fetal maldisposition was present as both maternal and fetal cause of dystocia, respectively in this animal. Cases of uterine torsion should be considered as emergencies and handling must be done as the case is presented. Uterine torsion-affected animals usually deliver calves in anterior presentation with majority in dorso-sacral or dorso-ilial and some in dorso-pubic position [3, 15, 16] while, rarely 5–10% of the cases in posterior presentation [11]. In this case, posterior longitudinal presentation and lumbo-sacral position of the fetus, rare in its occurrence was present. Frazer *et al.* [17] recorded that 63–69% calves from torsion-affected dam were male, as also found in this case and fetal death might be due to severity and delayed presentation of this case. However, the animal was treated and discharged on the same day and it recovered uneventfully.

Conclusion

A rare case of uterine torsion associated with posterior longitudinal presentation and lumbo-sacral position of the fetus in a buffalo and its successful management is reported.

References

1. Fleming G. Fleming's Veterinary Obstetrics. Baillière, Tindall and Cox, London. 1930, 235-50.
2. Cergolj M, Tomaskovic A, Makek Z. Diagnosis and treatment of uterine torsion during pregnancy in cattle. Tierärztliche Umschau. 1999; 54:79-83.
3. Prabhakar S, Singh P, Nanda AS, Sharma RD, Singh P. Clinico-obstetrical observations on uterine torsion in bovines. Indian Veterinary Journal. 1994; 71:822-24.
4. Dhaliwal GS, Vashista NK, Sharma RD. Uterine torsion in a goat—a case report. Indian Journal of Animal Reproduction. 1986; 7:90-91.
5. Ijaz A, Talafha AQ. Torsion of the uterus in an awassi ewe. Australian Veterinary Journal. 1999; 77:652-53.
6. Hopkins SM, Althouse GC, Jackson LL, Evans LE. Surgical treatment of uterine torsion in a llama (Lama glama). Cornell Veterinarian. 1991; 81:425-28.
7. Cebra CK, Cebra ML, Garry FB, Johnson LW. Surgical and nonsurgical correction of uterine torsion in new world camelids: 20 cases (1990–1996). Journal of American Veterinary Medical Association. 1997; 211:600-02.
8. Jung C, Hospes R, Bostedt H, Litzke LF. Surgical treatment of uterine torsion using a ventral midline laparotomy in 19 mares. Australian Veterinary Journal. 2008; 86:272-76.
9. Brown AJ. Torsion of the gravid uterus in a bitch. Veterinary Record. 1974; 94:202.
10. Thilagar S, Yew YC, Dhaliwal GK, Toh I, Tong LL. Uterine horn torsion in a pregnant cat. Veterinary Record. 2005; 157:558-60.
11. Noakes DE, Parkinson DJ, England GCW. Maternal dystocias. Arthurs veterinary reproduction and obstetrics, (Ed.) Noakes, D E. Saunders Harcourt, India, 2001.
12. Nanda AS, Sharma RD. Studies on serum progesterone levels in relation to occurrence of uterine torsion in buffaloes (Bubalus bubalis). Theriogenology. 1986; 26:383-89.
13. Srinivas M, Sreenu M, Lakshmi RN, Subramanyam KN, Prasad VD. Studies on dystocia in graded Murrah buffaloes: a retrospective study. Buffalo Bulletin. 2007; 26(2):40-45.
14. Purohit GN, Barolia Y, Shekhar C, Kumar P. Maternal dystocia in cows and buffaloes: A review. Open journal of Animal sciences. 2011; 1(02):41-53.
15. Drost M. Complications during gestation in the cow. Theriogenology. 2007; 68:487-91.
16. Aubry P, Warnick LD, DesCôteaux L, Bouchard E. A study of 55 field cases of uterine torsion in dairy cattle. Canadian Veterinary Journal. 2008; 49:366-72.
17. Frazer G, Perkins N, Constable P. Bovine uterine torsion: 164 hospital referral cases. Theriogenology 1996; 46:739-58.