

DYSTOCIA DUE TO FETAL MAL-POSTURE IN A NON-DESCRIPT MARE

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SUMMARY

A primiparous non-descript mare suffering from dystocia for the last 10 hours was brought to the Veterinary Clinical Complex (VCC). Per-vaginal examination with proper lubrication with liquid paraffin revealed the presence of a dead fetus with one forelimb extended in the birth canal and the other forelimb and head deviated in the downward direction. Manual per-vaginal delivery of the male fetus was performed following fetotomy. The dam had an uneventful recovery after 7 days post-partum.

Keywords: Dystocia, Fetotomy, Mal-posture, Mare

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Dystocia refers to any difficulty in the parturition process that may reduce neonatal viability, resulting from maternal injury, or require manual assistance (Dutt *et al.*, 2020). Regardless of the breed, the incidence varies between 2-13% in mares (Ellerbrock and Wehrend, 2023). Fetal malposition involving limbs and neck during foaling is recognized as the single most common cause of dystocia in equines. Delay in cases of dystocia may negatively impact the survival of foal and mare, and future reproductive potential of mare. The proportion of dystocia is comparatively high in primiparous animals (Ball, 2005). Compared to other animal species, mares are less prone to dystocia, but the event is a true emergency and minute-to-minute creates a difference in the survivability of foal and mare (Wilkins, 2008; Ruthrakumar *et al.*, 2023). The present case study reports successful management of dystocia due to ventral deviation of the fetal neck and flexion of one forelimb in a primiparous mare through fetotomy.

HISTORY AND OBSERVATIONS

A primiparous non-descript, a 2-year aged mare with ruptured water bags, straining and restlessness for the last 10 hours was brought to VCC, LUVAS, Hisar. The case was first manipulated at the field level by local paravet staff and then referred to the LUVAS for further treatment. The mucous membranes of the animal were congested. Rectal temperature and pulse rate were 101° F and 60/minute, respectively. The tail of the mare was bandaged and the perineum was cleaned properly with povidone iodine solution before starting obstetrical procedures. Vaginal examination with adequate lubrication with liquid paraffin after epidural anaesthesia using 3.5 ml of 2% lignocaine hydrochloride between first and second coccygeal vertebrae revealed scanty fetal fluid, dead fetus in

anterior longitudinal presentation and dorso-pubic position with one forelimb extended in the birth canal and the second forelimb and head deviated in downward direction. The absence of fetal reflexes confirmed the presence of the dead fetus.

TREATMENT AND DISCUSSION

Through obstetrical manoeuvres both the forelimbs were corrected and extended but the head was still not approachable. Further attempts were made to correct the posture and an eye hook was applied at the mandible and mild traction was applied which led to the fracture of the mandible. So, it was decided to go for fetotomy of the left forelimb and the head was brought into the birth canal. As the size of the pelvic cavity was smaller, the fetotomy of the fetal head was done at the level of the base of the neck and then traction was applied using a snare on the right forelimb and eye hook between 3rd and 4th thoracic

vertebrae to deliver the foetus (Fig. 1). The dehiscence of placenta took place with delivery of the fetus. The mare was administered with Inj. Normal Saline 2 litres IV, Inj. Oxytocin 20 I.U. IV in 500 ml Normal Saline Solution, Inj. Ceftriaxone 4 g IM, Inj. Metronidazole 3500 mg IV, Inj. Chlorpheniramine maleate 159.25 mg IM, and Inj. Ascorbic Acid 5000 mg IM. The treatment was advised for the next five days. The mare recovered without any complications.

The incidence of dystocia is lower in equines than in bovines, but the postural defects of limbs in equines result into serious difficulty in parturition than in bovines (Singh *et al.*, 2017). Different obstetrical manoeuvres for resolving dystocia in equines for assisted vaginal delivery include repulsion, rotation, version and extension. Likewise, for controlled vaginal delivery caesarean section and fetotomy are the two options. Malposture of

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Fig. 1. Dead Fetus delivered through fetotomy

fetal extremities in the equines is the root cause of dystocia, however faulty presentation and positions also occur to a lesser extent (Dutt *et al.*, 2020). When the fetus is dead, fetal fluid is scanty, the uterus is contracted and manipulations are not practicable, the immediate decision for further line of treatment should be undertaken. As per Vandeplasseche *et al.* (1971) fetotomy in equines causes a lower mortality rate than caesarean operation. Fetotomy is talented task in mares than in bovines because the birth cavity is longer and the fetal membranes may shed off faster (Frazer, 2001). Due care and expertise are required for fetotomy in equines, otherwise it may be potentially hazardous for the dam (Higgins and Wright, 1999; Singh *et al.*, 2017). Caesarean section should be the last resort to relieve dystocia in equines because it can adversely affect the dam's general health and future fertility (Abernathy-Young *et al.*, 2012). The post-partum complications

associated with caesarean section in equines include haemorrhage, peritonitis, incisional infection, retained placenta, toxic metritis and even death. In the current case study, the dystocia was resolved through fetotomy with utmost care to deliver the dead fetus. In the present case, fetotomy was a clear-sighted decision to save the life of the dam.

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RETRACTION OF ARTICLE

This article earlier available at <https://www.luvas.edu.in/haryana-veterinarian/download/harvet2016-dec/1.pdf> entitled “Occurrence of some organochlorine pesticide residues in poultry feed and meat” has been retracted by the authors because of some error made during the data analysis process of the experimental observations due to counting the number of samples showing the concentration of pesticide below its corresponding Limit of Detection. All authors take full responsibility for this mistake and sincerely apologize for any inconvenience it may cause.

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