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DYSTOCIA IN MARE DUE TO FETAL POSTURAL DEFECT: A CASE REPORT

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Abstract: A full term pregnant mare was presented with the complaint of unsuccessful attempt to deliver the fetus by a paravet. Mare was straining and showing restlessness. Water bag was ruptured 10 hours before. Per-vaginal examination revealed dry birth canal, dilated cervix and knee flexion of right fore limb of fetus. After sufficient lubrication and correction of postural defect a dead female fetus was delivered per vaginally by coordinated forced traction. Mare was recovered successfully after follow up treatment and advice.
Keywords: Mare, Knee flexion, Fetus, Dystocia, Force traction

Introduction

Dystocia in mares is perhaps one of the most challenging conditions faced by equine practitioners (Purohit, 2011). Failures of foal to adopt normal posture at term predispose dystocia in equines (Jackson, 2004). Malposture of long fetal extremities, head, and neck are the major cause of dystocia in mares (Thangamani *et al.,* 2018). Second stage of labor is a rapid event in most mares, with most foals delivered within 20–30 min after rupture of the chorioallantoic membrane (Frazer, 2011). Compared to other domestic animal species, equine species are less prone for difficult delivery, but when it occurs, is considered as true emergency because equines are precious species, where minute makes a difference in the survivability of the either fetus or mother (Norten *et al.,* 2007; Wilkins, 2008). The present communication describes the successful management of dystocia in a mare due to knee flexion of right fore limb of fetus.

Case history and observation

A full term pregnant mare was presented to Veterinary Clinical Complex DUVASU, Mathura with the history of rupture of water bags 10 hours before. The case was handled by a paravet also but could not deliver the fetus. Mare was showing straining and restlessness. On general clinical examination, mare was depressed and having congested mucous membranes. Per

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vaginal examination revealed that birth canal was dried and cervix was completely open. Further examination revealed that knee of right forelimb was flexed and the fetal reflexes were absent. Fetus was in anterior longitudinal presentation and dorso-sacral position. Based on history and vaginal examination case was diagnosed as dystocia due to postural defect.

Treatment

Mare was restrained in the right lateral recumbency (Figure 1). Mare was administered with Inj. tetanus toxoid @ 5 ml i/m, Inj. ceftriaxone @ 3 gm i/m, Inj. flunixin meglumine @ 1000 mg i/m, Inj. dexamethasone @ 40 mg i/m, inj. pheniramine maleate @ 10 ml i/m, Inj. dextrose normal Saline @ 3 litres i/v and normal saline @ 3 litres i/v. Epidural anesthesia was administered at first inter-coccygeal space with 5 ml of 2% lignocaine hydrochloride solution. As the birth canal was dried therefore birth canal was lubricated by liquid paraffin. Firstly, the flexed right fore limb was extended manually. Eye hooks were applied in the both eye canthus and head of the fetus was brought in the birth canal. Thereafter, Moore's obstetrical chains were applied at the fetlock joint of both fore limbs and with the help of coordinated forced traction, the dead female fetus was delivered (Figure 1). Whole placenta came out along with the fetus. The uterus was examined for any injury but there was no such damage. Thereafter, intrauterine therapy was given. For next three days, antibiotic, NSAID, antihistaminic and supportive therapy were advised. Animal recovered within next five days.

Discussion

Fetal maldiposition is one of the major cause of dystocia in mares (Dugdale, 2007). The incidence of maternal cause of dystocia in mare is less than fetal cause of dystocia (Jackson, 2004). Any fetal disposition other than anterior presentation, dorsal position and normal posture is likely to result in dystocia (Sane *et al.,* 1994). Abnormal postures includes lateral deviation of head and neck appears to be preponderance cause of severe dystocia (Dadarwal *et al.,* 2008; Frazer, 2009), Wry neck posture (Rice, 1994), deviation of head-vertex, nape and breast head posture (Yuongquist, 1986), carpal flexion posture (Nahkashi *et al.,* 2008), shoulder flexion unilateral (Swimming posture) and bi-lateral (Diving posture) (Christensen, 2008), foot nape posture (Dugdale, 2007), hock flexion posture, breech presentation (Frazer *et al.,* 1997). In the present case, epidural analgesia followed by ample lubrication with liquid paraffin was infused and fetus was delivered per-vaginally by obstetrical mutation procedure. In difficult cases, fetus can be removed by either fetotomy or caesarean section (Youngquist, 1986).

Conclusion

A delay in delivery after rupture of the chorioallantoic membrane may be critical for life of the foal. Therefore, rapid appropriate intervention, correct diagnosis and proper obstetrical approach is required for survivability of dam and foal along with future fertility of dam.

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Figure 1: Mare restrained in right lateral recumbency with delivered dead fetus