



Management of Dystocia Due to Ventrotransverse Presentation of Fetus in a Mare

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ABSTRACT

A case of dystocia in mare due to ventrotransverse presentation with lateral deviation of head of fetus was relieved successfully by version and forced traction under epidural anaesthesia.

Key words: Version, Ventrotransverse presentation, Dystocia, Mare.

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INTRODUCTION

Dystocia due to transverse presentation occurs in a pregnancy in which the fetus develops in both uterine horns and the uterine body. It occurs in 0.1% of births (Frazer, 2001). The ventro transverse presentation is more common in mares. The presentation occurs more frequently (18%) in draft horses compared to lighter breeds like thorough bred and standard bred (Frazer *et al.*, 1997). The fetus lies with its longitudinal axis oblique or perpendicular to that of the mare, with its limbs and abdominal surface presented to the pelvis. The feet or spinal column of the fetus and fetal membranes are palpable. The natural birth is impossible in such a presentation. The birth process starts with no progression and fetal membranes expulsion. Caesarean section is the best option for fetal delivery. Mutation and fetotomy of transversely presented fetus is difficult (Vandeplassche,

1980; Dugdale, 2007). Deviations of the head and neck are common type of abnormal posture in causing dystocia in all species (Roberts, 1971) and has been reported in indigenous mare (Singh *et al.*, 2020). Present report pertains to a case of dystocia in a mare due to ventrotransverse presentation along with lateral deviation of the head of fetus which was resolved by version and forced traction.

CASE HISTORY AND OBSERVATIONS

A case of dystocia in 8-years old full term Marwari mare in its third parity was reported to the veterinary clinical complex CVAS, Navania, Udaipur. The mare had normal gestation period and exhibited first stage of labour a day before. Water bag was ruptured last evening about 15 hours

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before the case was presented. At the time of presentation, all four limbs were protruded through vulva and a placental portion was also hanging from vulva (Fig. 1). Per-vaginal examination revealed forelimbs and hind limbs in the vagina with lateral deviation of the head. The fetus was in the ventrotransverse presentation.



Fig. 1. Ventrotransverse presentation

TREATMENT AND DISCUSSION

The examination ruled out twins or monsters. The mare was administered 5ml of 2% lignocaine as epidural anaesthesia to control straining. Sufficient lubrication of the birth canal was done by liquid paraffin. Forelimbs were repelled into uterus, simultaneously hindlimbs were extended in pelvis. The malpresentation was converted into longitudinal posterior presentation. Forced traction was applied using a snare and a dead male foal was delivered. All limbs were having angulation deformity though not ankylosed. (Fig. 2). The mare was administered intrauterine four bolus containing Nitrofurazone 60 mg and Urea 6 gm. Inj Dexamethasone @ 0.2 mg/kg iv, inj Flunixin @ 1.1 mg /kg iv, inj. Ceftriazone @ 25mg/kg iv and inj Oxytocin 50 IU im along with iv fluids after dystocia handling. The major portion of placenta was expelled with fetus. Animal showed toxemic signs next day. The management of toxemia using inj. Gentamycin @ 3.3 mg/kg iv bd, inj. Flunixin @ 1.1 mg /kg iv od, inj. Heparin @ 150 U/kg sc loading dose followed by 125U/kg bd for next 3 days and 100 U/kg bd next 2 days, inj. DMSO @ 0.5 mg/kg iv 5% in 5% dextrose bd and inj. Metronidazole @ 15 mg/kg iv qid, was given along with thirty liters of R.L. iv daily for five days. The uterus was flushed with 0.005% betadine in 3 liters warm R.L. followed by 50 IU Oxytocin im and 4 bolus of nitrofurazone

60 mg and urea 6 gm od for three days along with systemic treatment. Oral supplementation of HimROP (Himalaya pharmaceutical Ltd.) 200 ml bd was administered with antiulcer therapy by tab. Ranitidine orally @ 6.6 mg/kg qid for seven days. Remaining portion of placenta was expelled with uterine flush. The mare recovered in seven days. Mare returned to regular estrus cycle after one month.

In normal equine pregnancy the fetus develops in one uterine horn and body. In transverse presentation fetal occupancy of uterus is abnormal and is always associated with bicornual pregnancy leading to normal delivery impossible (Jackson, 2004). In the present case, the dystocia was relieved successfully by version and forced traction. The method of choice for delivery of fetus in ventrotransverse presentation is caesarean hysterotomy (Parkinson *et al.*, 2019). Aim of vaginal interference is to convert abnormal transverse presentation into longitudinal one, usually posterior presentation (Parkinson *et al.*, 2019). Laterally deviated head eased version in present case.



Fig. 2. Per-vaginal delivered dead fetus

CONCLUSIONS

The present case depicts about the successful dystocia handling by version and forced traction in a mare due to ventrotransverse presentation with lateral deviation of head.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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