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Clinical Article

SUCCESSFUL MANAGEMENT OF FETAL DYSTOCIA DUE TO DOG SITTING POSTURE WITH NAPE PRESENTATION IN A JENNY

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SUMMARY

Obstetrical emergencies like dystocia are considered to be the life threatening disorder of dam and foetus. The long extremities predispose the foetus to pave the way for postural abnormalities. In donkeys, the epidemiological data of occurrence and etiology of dystocia were studied not well known or is still in its infancy. The most prominent attributable factor of dystocia in donkeys were often due to postural abnormalities leading to severe injuries to reproductive tract and increased odds for mortality of foetus. A full term pregnant eight year old female donkey in her third parity was brought to Large Animal Obstetrical Unit, VCC, VCRI, Namakkal with the history of straining since two days and water bag ruptured one day before. General clinical examination revealed elevated body temperature (104 ºF) with right lateral recumbency and vulvar edema. Haematology revealed leucocytosis with neutrophilia. Upon vaginal examination, the foetus was found in dog sitting posture with nape presentation and absence of pedal reflex. Hence the case was diagnosed as dystocia due to postural defects. Treatment include the thorough lubrication of the foaling passage under epidural anaesthesia followed by mutation operation and traction a dead male foetus relieved per vaginally. As a post obstetrical management the donkey was treated with parentral fluids, antibiotics and anti-inflammatory administered for five days.

Keywords: Dog sitting posture, Dystocia, Jenny

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Dystocia in equids is always an emergency condition because within an hour of onset of second stage of labour, placental separation from lining of the uterus begins and leads to progressive asphyxia of foal (Noakes, 2001). Jenny's reproductive characteristics are quite similar to those of a mare because they both belong to the genus Equus. In donkeys, the average gestation period lasts between 10½ and 14½ months. Dystocia in Jenny is very rare and occur occasionally, about 1 to 4 % of foaling. One of the most difficult obstetrical challenges is the dogsitting posture (Card, 2002). The incidence of dog-sitting posture is reported to be 0.7% (Baldwin *et al.*, 1991). However, the per-vaginal delivery of foal is difficult due to its long extremities (Arthur *et al.*, 2001). The present study deals with the successful management of fetal dystocia due to dog sitting posture with nape presentation in a jenny.

A full term pregnant eight year old female donkey in her third parity was brought to Large Animal Obstetrical Unit, VCC, VCRI, Namakkal with the history of straining since 2 days. The water bag appeared and ruptured one day before. The jenny was presented in lateral recumbency. General clinical examination revealed that the Jenny was dull, depressed with vulvaledema and elevated rectal temperature (104 ºF). Haematological parameters revealed leucocytosis with neutrophilia. Vaginal examination revealed that fully dilated birth passage engaged with dead fetus. Further examination of the fetus revealed that the fetus is in oblique ventro vertical presentation (P1), dorso-sacral position (P2) and extended both fore limbs with extension of both the hind limbs beneath the body of fetus and head of the fetus touches the breast region of the fetus (P3). Hence the case was diagnosed as dystocia due to dog sitting posture with nape presentation.

Epidural anaesthesia was given using 3 ml of 2% lignocaine hydrochloride in sacro-coccygeal space. Prior to mutational operation the birth canal was thoroughly lubricated using liquid paraffin, both the forelimbs were secured using obstetrical snare. Repulsion of both the hind limbs and forelimbs were done one by one into the pelvic cavity. Mutational operations were performed to correct the nape presentation; briefly, the fetus was repelled into the gravid uterus to correct the neck deviation after creating the pelvic room space the postural defect of head and neck was corrected. Then William's long obstetrical hook placed on the inner canthus of the left eye of the fetus and traction applied to bring the fetal head out of vulva. Both the fore limbs were taken outside the vulva by gentle traction. Finally, a dead male foal along with fetal membranes delivered per-vaginally. As a part of post obstetrical management therapy the jenny was treated with parenteral fluids, antibiotics, anti-inflammatory and anti-histamines as follows for five days.Inj. Ringer's Lactate 1 lit i.v., Inj. Dextrose Normal Saline 1 lit i.v., Inj.

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Fig. 1. Dead male foal with fetal membrane after delivery

Ceftriaxone 20 mg/kg i.v., Inj. Oxytocin 30 I.U. i.m., Inj. Flunixin meglumine 1.1 mg/kg i.v., Inj. Tetanus toxoid–30 LF units i.m., Inj. Chlorpheniramine maleate 0.5 mg/kg i.m.. The animal recovered uneventfully without much complications.

Dystocia in equids is often considered to be the life-threatening disorders for both the mare and foal. There is a strong association exist between the duration of stage II labour and foal survival; hence, the necessary obstetrical interventions need to be taken to safeguard the life of the fetus and to the prevent serious injuries to the dam. So, action must be taken as soon as a problem is detected (Vaala, 2006). If a mare persists in 2nd stage of labour beyond 20 minutes without fetal movement dystocia must be suspected (Frazer, 2009). Further, caesarean section in equines is indicated for irreducible fetus, severe maldisposition and protracted dystocia (Dutt *et al.*, 2020). In our case, nape presentation and dog sitting posture might be due to improper orientation of fetus prior to foaling or might be due to improper extension and flexion of fetal extremities.

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