www.ThePharmaJournal.com

The Pharma Innovation



ISSN (E): 2277-7695 ISSN (P): 2349-8242 TPI 2024; 13(2): 269-271 © 2024 TPI www.thepharmajournal.com Received: 11-12-2023 Accepted: 15-01-2024

AV Varshini

Department of Animal Reproduction Gynaecology and Obstetrics, Nagpur Veterinary College, Maharashtra Animal & Fishery Sciences University, Nagpur, Maharashtra, India

CK Lakde

Department of Animal Reproduction Gynaecology and Obstetrics, Nagpur Veterinary College, Maharashtra Animal & Fishery Sciences University, Nagpur, Maharashtra, India

DS Raghuwanshi

Department of Animal Reproduction Gynaecology and Obstetrics, Nagpur Veterinary College, Maharashtra Animal & Fishery Sciences University, Nagpur, Maharashtra, India

SB Akhare

Department of Animal Reproduction Gynaecology and Obstetrics, Nagpur Veterinary College, Maharashtra Animal & Fishery Sciences University, Nagpur, Maharashtra, India

AP Gawande

Department of Animal Reproduction Gynaecology and Obstetrics, Nagpur Veterinary College, Maharashtra Animal & Fishery Sciences University, Nagpur, Maharashtra, India

GA Fiske

Department of Animal Reproduction Gynaecology and Obstetrics, Nagpur Veterinary College, Maharashtra Animal & Fishery Sciences University, Nagpur, Maharashtra, India

Corresponding Author: AV Varshini

Department of Animal Reproduction Gynaecology and Obstetrics, Nagpur Veterinary College, Maharashtra Animal & Fishery Sciences University, Nagpur, Maharashtra, India

Successful management of dystocia due to downward deviation of head in mare

AV Varshini, CK Lakde, DS Raghuwanshi, SB Akhare, AP Gawande and GA Fiske

Abstract

Dystocia in Mare is a very rare and serious condition. A 10 year old Thoroughbred Mare was reported at Veterinary Clinical Complex, Nagpur Veterinary College, Nagpur with a complaint of continuous straining since late night. History revealed that she had near to complete gestation. Per-vaginal examination revealed that cervix was fully dilated. Head of fetus was placed downward and having fetal responses revealed a live fetus. For the purpose of facilitating downward head-deviation correction, the fetus was repulsed back into the uterus. With the help of blunt eye hook and ropes, live fetus was withdrawn by applying forced traction. The Mare was treated with Fluid therapy, Antibiotic and Anti-inflammatory drugs and she had recovered in 5 days. Additionally, tetanus shots were administered prophylactically. The most frequent cause of dystocia in the mare is head deviation, which is a critical condition that can affect both the dam & the fetus.

Keywords: Mare, dystocia, downward deviation of head

Introduction

Management of dystocia in mare is one of the most challenging conditions faced by the veterinarian. Mostly it is due to abnormal presentation, position or posture. A dead or compromised fetus often is not properly positioned in the pelvic canal. Dystocia due to fetal-maternal disproportion or primary uterine inertia is rare in mares (Sertich 2022)^[4]. During the procedure neonatal viability reduces and causes injury to mare (Purohit *et al* 2011)^[3]. Beyond 30 minutes of Stage II labor in mare, increase in each 10 minutes is associated with a 10% increase in the existing risk of a foal being born dead and a 16% increase in risk of the foal not surviving to discharge from a referral hospital or clinic (Norton *et al.* 2007)^[2]. Duration between rupture of the chorioallantoic membrane to delivery of the fetus was 13.6 minutes shorter for foals that were born alive and survived to discharge than for foals born dead or that did not survive to discharge (Byron *et al.* 2003)^[1].

Case history and observation:

A case of mare was reported at Veterinary Clinical Complex, Nagpur Veterinary College, Nagpur with a history of continuous straining since last night. She had mated 11 months back. She had normal temperature (102.5 \circ F) with Pink CMM & normal respiratory rate. Per-vaginal examination revealed that presentation was anterior longitudinal, position was downward deviation of head, posture was flexion of both Forelimbs. Fetal response revealed that it is a live fetus.

Correction and Management

Mare was properly restrained in standing position. Epidural anaesthesia (2% Lignocaine) was administered to prevent straining of the animal. Using proper lubrication with viscous SCMC solution. Primarily, the whole fetus was repelled back into the uterus. After that forelimbs were flexed along the side of body. It gives free space for head to be rotated laterally and then brought upward & forward over the pelvic brim. By this way, the abnormal posture was corrected. Blunt eye hook was placed at inner canthus of the eye. Rope was tied to both forelimbs and then live fetus was withdrawn by applying gentle traction. Fetus delivered was male in gender. The umbilical cord of fetus was clamped cut and painted with povidone iodine. Fluid therapy (Inj. RL and DNS - I/V), Antibiotic (Inj. Intamox- 4.5 g I/M), Anti-inflammatory (Inj. CPM-10 ml, Inj.Megludyne-10 ml I/M), Supportive therapy (Inj. Tribivet-10 ml I/M). Tetanus shot was given prophylactically.

https://www.thepharmajournal.com

The Pharma Innovation Journal



Fig 1: Case Presentation



Fig 2: Per-vaginal examination



Fig 3: Abnormal posture of foal



Fig 4: Application of blunt eye hook to inner canthus of eye



Fig 5: Application of snares to forelimbs of foal



Fig 6: Live male foal

Case Discussion

Mare dystocia is a true emergency and threatens survival of both dam and foetus. Alignment of the fetus in the birth canal during a normal delivery is described as Anterior presentation, dorsal-sacral position, with both forelimbs extended and the head extended. Failure of the fetus to be properly oriented in the birth canal as foaling progresses will almost always prevent normal passage and result in dystocia. The most common causes of dystocia in the mare are abnormalities of fetal posture (i.e. abnormal alignment of the head or forelimbs). A retrospective study of over 1,000 equine births noted that abnormalities of fetal posture were associated with 37.7%. A deflected head is the most common cause of dystocia. This can be corrected by repositioning the head or partial fetotomy or by caesarean section. Dystocia must be suspected if the first stage of labor is very long or foal not born in 20-30 minutes of rupture of fetal membranes and release of fluids. The present case is a documentary record of dystocia due to primary uterine inertia in a mare and its successful management.

Conclusion

A dystocia is an emergency, when the foal is still alive. A successful outcome is dependent on the clinicians' ability to make a correct diagnosis in a timely manner and the possibility to treat the mare accordingly as serious complications occur.

References

1. Byron CR, Embertson RM, Bernard WV, Hance SR, Bramlage LR, Hopper SA, *et al.* Dystocia in referral

The Pharma Innovation Journal

hospital setting approach and results. Equine Vet J. 2003;35:82-85.

- 2. Norton JL, Dallap BL, Johnston JK, Palmer JE, Sertich PL, Boston R, *et al.* Retrospective study of dystocia in mares at a referral hospital. Equine Vet J. 2007;39:37-41.
- 3. Purohit GN. Intra-partum conditions and their management in mare. J Livestock Sci. 2011;2:20-37.
- 4. Sertich PL. Periparturient emergencies. Vet Clin North Am Equine Pract. 2022;10:19-36.