Fetal dystocia due to postural defects of neck and carpals in a jenny: A case report

R. Katiyar[*#], S.S.D. Sacchan[*], M. Manzoor[*], F.A. Khan[*], Shiv Prasad[*], H.P. Gupta[*]

Department of Veterinary Gynaecology and Obstetrics, College of Veterinary and Animal Sciences, G.B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, 263145 India
[*]Equal contribution; [#]Corresponding author; Email: rahul.katiyarvet@gmail.com Ph:. 91-9456725281

Journal of Livestock Science (ISSN online 2277-6214) 6:13-15
Received on 11/03/2015; Accepted on 21/3/2015

Abstract

This article puts on record successful management of dystocia due to lateral deviation of head and neck and flexion of carpal of both forelimbs in a 5 year old jenny in her first parity at outpatient department of VTH, CVASc, G.B.P.U.A &T, Pantnagar. The postural abnormalities of the fetus were corrected by applying repulsion on the brisket region and the head and neck were brought into normal posture by holding the mouth of the fetus in the palm. The fore limbs were brought to normal posture by grasping the hoof of the fetus and straightened one by one. The fetus and the foaling passage were thoroughly lubricated with liquid paraffin. A dead male foal was delivered per vagina after applying traction. The post operative medication was followed by healthy recovery.

Key words: Dystocia; Jenny; Lateral deviation of head; Flexion of carpals

Introduction

Jenny is very similar in many reproductive aspects to the horse mare (Pugh, 2002). In the equides, because of the relatively early separation of the placenta, foal survival is very short; thus if there is dystocia there will be stillbirth (Noakes, 2001). The gestation period of jenny is of 365 to 376 days (Roberts, 1971) but extreme variations range from 340 to 395 days is observed (Chauhan et al., 2013). Foaling is rapid and forceful event. Early intervention is necessary if the foal is to be saved (Ricketts et al., 2006). Donkey dystocia or obstetric cases have been reported, but their true incidence and nature is still unknown and it was only occurring in 1-4% of all foaling (Threlfall, 2007). Dystocia was found to be responsible for 20% of foal mortality within 48 hours of birth (Haas, 1996). Females that suffer from severe dystocia should not be served at the foal heat; if they are, then pregnancy rates will be lower than normal for this stage, and a small number will suffer from traumatic injuries which may result in sterility. All studies have shown that dystocia occurs more frequently in primipara than in pluripara (Haas, 1996). This case report describes successful handling of dystocia in jenny caused by abnormal posture (lateral deviation of head and neck and flexion of both carpals) of fetus.

Case presentation

A 5 year old jenny in her first parity was presented to outpatient department of Veterinary Teaching Hospital, College of Veterinary and Animal Sciences, G.B. Pant University of Agriculture and Technology, Pantnagar with a history of complete gestation, straining since morning, the water bag ruptured and treated by a local vet without any success. The animal was restless and in standing posture. The rectal temperature was 101.5^{o}F; heart rate was 36 per minute. The animal is administered with 2% lignocaine hydrochloride epidurally. Per vaginal examination revealed complete dilatation of cervix and dry foaling passage. A dead fetus was palpable with anterior longitudinal presentation, dorsosacral position and lateral deviation of head and neck and flexion of carpals of both forelimbs. The postural abnormalities of the fetus were corrected by applying repulsion on the brisket region and the head and neck were brought into normal posture by holding the mouth of the fetus in the palm. The fore limbs were brought to normal posture by grasping the hoof of the fetus and straightened one by one. Snares were applied on both the fore limbs at fetlock joint and a blunt eye hock was placed in the right orbit of the fetus. The fetus and the foaling passage were thoroughly lubricated with liquid paraffin and traction was applied. A dead male foal was delivered per vaginally after applying traction (Fig. 1). The jenny was administered with fluid therapy (4 litres of Normal saline and 3 litres of Dextrose normal saline IV), antibiotic (3.5g of ceftriaxone-tazobactan IV; Intacef-Tazo®, Intas Pharmaceuticals Ltd, Ahmedabad, India), anti-inflammatory (50 mg of meloxicam IM; Melonex®, Intas Pharmaceuticals Ltd, Ahmedabad, India), 70 mg chlorpheniramine maleate IM (Anistamin®, Intas Pharmaceuticals Ltd, Ahmedabad, India), tetanus toxoid 5ml (Serum Institute of India Ltd, Pune, India) , and 8 ml multivitamin injection (MVI®) were administered. Four furea boluses were placed in the uterus of the jenny and owner was advised for proper care of the animal.

Fig. 1. Male fetus of jenny

Discussion

Equine dystocia is a true emergency and threatens survival of dam and fetus both (Freeman et al., 1999). Although showing a lower incidence in horses than in cattle, defects of limb posture cause more serious dystocia in

mares than in cows. Dystocia risks are increased in miniature donkeys because of the domed large forehead of some foals and following abortion due to malformation (Chauhan et al., 2013). While correcting the postural defects of limbs it is necessary to protect the uterine and vaginal wall from lacerations and tears by the hardy nature of the hooves. The dystocia in equides is urgency and should be treated as early as possible.

References

1) Chauhan P. M., Sindhi S. H., Tha K. B. 2013. Fetal dystocia due to dorso-pubic position and postural defects in a Jenny: a case report. Veterinary World, 6(2): 116-117.
2) Freeman D. E., Hungerford L.L., Schaeffer D., Lock T.F., Sertich P.L., Baker G.J., Vaala W.E., Johnston J.K. 1999. Caesarean section and other methods for assisted delivery: comparision of effects on mare mortality and complications. Equine Veerinary Journal 31:203-207.
3) Haas S. D., Bristol F., Card C.F. 1996. Risk factors associated with the incidence of foal mortality in an extensively managed mare herd. Canadian Veterinary Journal 37**:** 91.
4) Noakes D.E. 2001. Dystocia and other disorder associated with parturition. In; Noakes, D.E., Parkinson, T.J., England G.C.W., ed.; Arthur's Veterinary Reproduction and Obstetrics, 8th ed. Elsevier Ltd.; 2001, pp. 341-355.
5) Pugh D.G. 2002. Donkey reproduction. Proceedings of American Association of Equine Practice 48, pp. 113-114.
6) Ricketts S.W., Barrelet A., Barrelet F.E., Stoneham S.J. 2006. The stallion and mare reproductive system In: Higgins, A.J. and Snyder, J.R., ed.; The Equine Manual 2nd ed. Elsevier Ltd.; 2006, pp. 713-763
7) Roberts S.J. 1971. Veterinary Obstetrics and Genital Diseases, 2nd ed. C.B.S. Publisher and distributors. 1971, pp. 233.
8) Threlfall W.R. 2007, Parturition and dystocia. In: Youngquist RS, Threlfall WR eds. Current Therapy in Large Animal Theriogenology 2nd edition Missourri Saunders Elsevier p 118-30.
9) Youngquist R.S., Threlfall W.R. 2007. Current Therapy in Large Animal Theriogenology, 2nd ed. Elsevier Ltd.; 2007, pp. 118-130.