Dystocia due to cebocephalic emphysemated fetus in a crossbred heifer

M Honparkhe, S Ghuman, A Malik

Citation

M Honparkhe, S Ghuman, A Malik. *Dystocia due to cebocephalic emphysemated fetus in a crossbred heifer*. The Internet Journal of Veterinary Medicine. 2008 Volume 7 Number 1.

Abstract

The present case report depicts a rare dystocia due to cebocephalic emphysemated fetus in a crossbred heifer and its successful per vaginum delivery through obstetrical manoeuvres.

INTRODUCTION

Cebocephalus or Cyclopia is a teratological defect, commonly encountered in pigs and sheep (Roberts, 1971) but rarely reported in bovine (Gupta and Anand, 2002, Ozkan et al 2005) and caprine (Ashokan et al., 1990). It is characterized by single eye orbit with doubling of eye balls, rudimentary eyelids, tubular appendage like nose placed above the centrally located eye and longer lower jaw than upper one. The condition is often incompatible with fetal life and may cause dystocia. The present case report puts on a record of dystocia due to emphysemated cebocephalic fetus along with dam's vaginal stenosis and its successful per vaginum delivery.

CASE HISTORY AND OBSERVATIONS

A crossbred heifer was presented to university veterinary clinics with over gestation by 10 days. There was a history of straining for the last 24 hours and ruptured water bags. Earlier attempts for per vaginum delivery of fetus in field were not successful. The clinical parameters viz heart rate and respiratory rate were in normal range, but temperature was on higher side (103.5*F). Vaginal examination revealed moderately relaxed and dry birth passage along with vaginal stenosis. The fetus was emphysemated with head and limbs palpable in the cervix. Absence of suckling and eye ball reflex indicated that fetus was dead.

Figure 1

Fig. 1: Cebocephalic fetus characterized by a nose looking like a trunk (arrow) placed above the centrally located single eye



TREATMENT AND DISCUSSION

Following epidural anaesthesia (7ml, 2% lignocaine Hcl) and ample lubrication of the birth passage with sodium carboxymethyl cellulose gel (carmellose Na%, WDT, Garbsen, Germany), moderate traction was applied on forelimbs but failed to deliver fetus probably due to vaginal stenosis. Thereafter, decision was taken to give longitudinal incision (around 10 cm) on the dorsal wall of vagina with guarded knife. Then moderate traction was applied and fetus was delivered successfully. The placenta was removed completely soon after the delivery of the fetus. The dorsal incision was sutured blindly with chromic catgut. The animal was treated with antibiotics along with supportive therapy for 4-5 days. Follow up of case revealed uneventful

recovery.

Careful examination of the fetus revealed large single orbit with single eye, rudimentary eyelids and defective jaws. The nose appeared as tubular appendage placed above the centrally located eye looking like a trunk (Fig 1). All these physical characteristics of the deformed fetus were suggestive of a condition known as cyclopia and classified under teratological defects of embryonic development (Roberts, 1971).

The complications for per vaginum delivery of cyclopia fetus in the present case came up because of vaginal stenosis and fetal emphysema. In sheep the condition has been reported due to ingestion of Veratrum californicum in sheep

(Binns et al., 1963). However, the possible cause of this defect in the present case could not be ascertained.

References

- r-0. Binns, W.; Anderson, W. A. and Sullivan, D. J. (1960). Further observation on a congenital cyclopean type malformation of lambs. J. Am. Vet. Med. Assoc. 134: 180. r-1. Binns, W.; James, L. F.; Shupe, J. L. and Everett, G. (1963). A congenital cyclopian type malformation lambs induced by maternal ingestion of a range plant Veratrum Californicum. Am. J. Vet. Res. 24: 1164.
- r-2. Gupta, K. A. and Anand, T. C. (2002). A cebocephalus (cyclopia) monster in a non-discript cow. Indian J.Anim.Reprod. 23: 86.
- r-3. Ozkan, K.; Gurbulak, K.; Takc, I.; Ozen, H.; Kacar, C. and Pancarc, M. S. (2005). Atypical Cyclopia in a Brown Swiss Cross Calf: A Case Report. J. Vet. Med. 35 (3): 152-154.
- r-4. Roberts, S. J. (1971). Veterinary Obstetrics and Genital Disease. 2nd Edn., CBS Publishers, New Delhi.

Author Information

Mrigank Honparkhe, M.V.Sc.

Assistant Gynaecologist, Department of Animal Reproduction, Gynaecology & Obstetrics Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana - 141004, Punjab, India.

SPS Ghuman, PhD

Associate Professor, Department of Animal Reproduction, Gynaecology & Obstetrics Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana - 141004, Punjab, India.

Asloob Ahmad Malik, M.V. Sc.

Scholar, Department of Animal Reproduction, Gynaecology & Obstetrics Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana - 141004, Punjab, India.