SUCCESSFUL DELIVERY OF A CYCLOPIA (CEBOCEPHALUS) MONSTER IN A PLURIPAROUS CROSSBRED COW

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ABSTRACT

A typical case of cyclopia causing dystocia in a crossbred cow and its successful delivery is reported.

Key words: Cyclopia, Dystocia, Crossbred cow, Vaginal delivery.

INTRODUCTION

Cyclopia or Cebocephalus is a teratological defect, characterized by a single orbit in which global tissue is absent or rudimentary or in which the eyeballs vary from a single apparently normal eye through all degrees of doubling to one consisting of two complete but small adjacent globes, seen most commonly in pigs and sheep (Roberts, 2004). It is infrequently reported in caprine and bovine (Gupta and Anand, 2002, *Ozkan et al.,* 2005). Such defect is often incompatible with fetal life and may cause dystocia. This paper aims to report a case of cyclopia causing dystocia in a crossbred cow and its successful delivery per vaginum.

CASE HISTORY AND CLINICAL OBSERVATIONS

A full term pregnant crossbred cow in its third parity aged about five years was attended at doorstep of a farmer with the history of severe straining for the last 16 hours and the rupture of water bags 6-7 hours back. No fetal parts were visible at the vulva. Attempts by the local veterinarian by traction for delivery of fetus were not successful. The previous two deliveries were normal with normal male calves. Vaginal examination revealed a completely dilated cervix, dry birth canal and fetus in anterior longitudinal presentation, dorsosacral position with bilateral carpel flexion. The fetal head along with face was felt somewhat abnormal.

TREATMENT AND DISCUSSION

The animal was restrained properly in right lateral recumbency. Following posterior epidural anesthesia (10 ml, 2% Lignocaine HCL), birth passage was well lubricated with liquid paraffin. After assessing the fetus, a snare was placed around the fetal lower mandible. Then fetus was repelled into the uterus to create space for manipulation. After mutation, both the fore limbs were snared separately and application of traction resulted in successful delivery of a dead male fetus. Following delivery the cow was infused with 10 litres each of 5% Dextrose normal saline and normal saline solution intravenously. A course of broad spectrum antibiotic Enrofloxacin @5mg/kg b.wt and analgesic Meloxicam 150 mg were administered intramuscularly as well as 4 boli of Furea was placed in uterus for three consecutive days. Calcium borogluconate (450 ml) and Injection of Dexamethasone 60 mg were given intravenously on the day of treatment only. Follow up of case revealed uneventful recovery.

Examination of the fetus revealed large single orbit with single eye towards the center of its head

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(Fig.). The nose was in the form of an outgrowth over the head like a small tubular appendages covered with skin. This rudimentary nose did not communicate with the pharynx. The skull was small and the lower jaw, which appeared larger than the defective upper jaw was curved laterally at its cranial end. Tongue was completely protruded over the lower jaw. All these physical characteristics of the deformed fetus were indicative of Cyclopia (Cebocephalus) and classified under teratological defects of embryonic development (Roberts,2004). Predominantly certain alkaloids including cyclopamine, jervine, and cyclopasine are known to cause cyclopia among other birth defects when consumed during early pregnancy, especially of the Veratrum spp. Gupta and Anand (2000) reported a Cyclopia (cebocephalus) monster in a non descript cow and noted that both the eyeballs were rudimentary and fused. Such fetal monster was also observed by Jana and Ghosh (2002) and Khasatiya (2010) in a crossbred cow. However, Honparkhe *et al.* (2009) reported Cebocephalus fetus characterized by nose looking like trunk placed above the centrally located eye in a crossbred heifer.

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Fig. Cyclopia (Cebocephalus) monster delivered per-vaginum.