

MANAGEMENT OF DYSTOCIA DUE TO DOUBLE HEADED MONSTER IN A CROSSBRED JERSEY COW

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ABSTRACT

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Foetal anomalies or monsters occurs as a cause of dystocia in all the farm animals and is more common in cows. Case of double headed monster found in crossbred cow is reported.

Key words: Dystocia, anomalies, monster, cow.

INTRODUCTION

Embryonic duplications being the major congenital problem could occur due to imperfect duplication of germinal area forming partially or completely duplicated body structures (Roberts, 1971). Dicephalus is an embryonic duplication of the head resulting from incomplete twinning in humans and animals (Jenkins and Hardy, 1968). This is a rare report of a dystocia due to dicephalus, monostomus, tetraophthalmus, dibrachius monster in a cross bred Jersey cow.

CASE HISTORY AND OBSERVATION

A 6 years Jersey cross bred cow on its fourth calving was presented to the Large Animal Obstetrics Unit of the Madras Veterinary College Teaching Hospital, Chennai. Anamnesis unveiled that the animal was straining since 36 hours, water bag was ruptured 30 hours back. Attempts were made by quacks to deliver the foetus and found to be unsuccessful. On general examination, it was noticed that animal was dull and rectal temperature was 102.3°F, all other vital physiological parameters were within the normal range. Per vaginal examination revealed the fore limbs and distorted foetal head in the vaginal passage and foul smelling discharge. Upon thorough examination, the foetus was found to have two heads and one neck which was confirmed as double headed monster. Per vaginal delivery was ruled out and decided to perform C-section.

TREATMENT AND DISCUSSION

Caesarean section was performed under high caudal epidural anaesthesia combined with local infiltration anaesthesia produced by 2% Lignocaine solution on left ventro-dorsal site adopting standard protocol described by Noakes *et al.* (2009). The uterus was located and incised and a double headed foetal monster was removed by grasping hind limbs. Uterus was then closed after flushing with metronidazole, using cushing inversion sutures. Laprotomy incision was closed as per standard procedure after flushing peritoneal cavity with metronidazole solution. The animal was administered with Inj. Cefaperazone plus sulbactam 4.5 gm iv, Inj. Meloxicam 15 ml im, and Inj. Chlorpheniramine maleate 10 ml im, along with inj. 5% Dextrose normal saline 4 liters intravenously. Antibiotics, anti-inflammatory and supportive therapy was continued for five days.

The monster foetus fig. consisted of two heads (dicephalus), each head with separate nostrils, two eyes (tetraophthalmus) and two ears. The heads had separate atlas bone (biatlanticus) free from each other but fused at the caudal part of the axial bones and continued as the single vertebral column. Congenital anomalies can be defined as structural or functional abnormalities including metabolic disorder which are present at the time of birth (WHO Fact sheet, 2014). The congenital problems may cause structural abnormality, functional abnormality or both in only one system or different systems (Unver *et al.* 2007).

The mechanism behind the duplication of the foetal parts either cranial or caudal was given by Finberg *et al.* (1994), who stated that the embryonic disk starts to differentiate on the day 13 and if the split occurs after day 13, the twins may share body parts in addition to sharing their chorion and amnion, whereas, Fernando (1993) explained that there was no theoretical fission of the vertebrate embryo at any stage of development. According to Dennis *et al.* (1986) the possible reasons for the congenital abnormalities could be variable, which includes genetics, plant toxin, microbial agent, drugs, and mineral deficiencies and other physical causes such as radiation and hyperthermia. Similar type of monster had been reported by Chandrahasan *et al.* (2003) and Chauhan *et al.* (2012).

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Fig. Double headed monster