Management of dystocia due to double headed monster in a crossbred cow

Mohita Rai, Aditya Mishra and Amir Amin Sheikh

Abstract
Monsters or foetal anomalies are most common cause of dystocia in all farm animals and is quite common among cows of crossbred origin. A case of dystocia caused due to double headed monster was reported.

Keywords: Foetal anomalies, dystocia, dicephalus, monster

Introduction
Duplication of embryo is a congenital problem of embryo which is caused by imperfect/incomplete twinning/duplication of germinal area forming partially or completely duplicated body structures (Roberts, 1971) [1]. Dicephalus is an embryonic duplication of the head resulting from incomplete twinning in humans and animals. It is rare case of dystocia caused by dicephalus monostomus, tetraophthalmus, dibrachius monster in crossbred cow.

Case Study
A 7 year old primipara crossbred Haryana cow was presented to Veterinary block hospital, Patera Dist Damoh (MP). History reveals that the animal was straining for past 28 hours, water bag was already ruptured, unsuccessful attempts were made by local animal health workers to deliver fetus. On examination it was found that animal was dull, rectal temperature 102.2°F and rest vital physiological parameters were within normal range. Per vaginal examination revealed the forelimb and distorted foetal head in the vaginal passage with foul smelling discharge. On thorough animal examination, the foetus was found to have two head thus making per-vaginal delivery was not possible. Caesarean section was next to being attempted.

Treatment Plan
Caesarian section to be performed under high caudal epidural anesthesia combined with local infiltration anesthesia produced by 2% lignocaine solution on left ventro dorsal site adopting standard protocol by Noakes et, al (2009) [2]. Location of uterus was traced, incised and a double headed foetal monster was removed by grasping hind limbs (Fig. 1). Uterus was then closed after flushing with Metronidazole using cushing inversion sutures. Laprotomy incision was closed as per SOP after flushing peritoneal cavity with metronidazole solution. Animal was administered with inj cefaperazone salbutum combination 5 gm I.V, Inj Meloxicam 0.5mg/kg b.wt and Inj chlorpheniramine maleate 15 ml along with I.V. fluids 5% DNS 5 liter. Antibiotics, Antiinflammatory and Supportive medication continued for 5 days. After 5 days animal was given Ayurvedic drugs (Estrona) for complete involution of uterus and normalization of estrous cycle for another 10 days.

Results
After lapotomy the double headed monster which remain alive for around half an hour and then died due to sudden asphyxiation and death.

Discussion
The figure of monsters consisted of two heads (dicephalus), each head with separate nostrils two eyes (tetraophthalmus) and two ears. The head had separate atlas (biatlanticus) free from each other but the caudal part of axial bone was fused and continued with single vertebral column.
These foetal anomalies are congenital can be defined as structural or functional abnormalities, includes metabolic disorder which are present at the time of birth. The congenital problems may cause structural abnormalities, functional abnormalities or both in only one system or different system (Unver et al., 2007) [3] the mechanism behind the duplication of foetus either cranial or caudal was given by Finberg et al. (1994) [4] who stated that the embryonic disk starts to differentiate. According to Dennis and Leipold, (1986) [5] can be 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) [6] and Chauhan et al. (2012) [7].

References
1. Roberts SJ. Veterinary obstetrics and genital diseases, 2nd Ed. C.B.S. Publisher and distributors, Delhi, 1971, 70-73.