



Dystocia Due to Hydrocephalus Monster in A Murrah Buffalo

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ABSTRACT

The present communication describes about successful management of an unusual case of dystocia due to hydrocephalus monster with bilateral anophthalmia condition in a 7-year-old Murrah buffalo.

Key words: Buffalo, Dystocia, Hydrocephalus, Monster.

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INTRODUCTION

The causes of dystocia are either of maternal (25%) or fetal (75%) origin (Roberts, 1986). Fetal monster may arise due to faulty embryonic development. Dystocia due to fetal monster especially hydrocephalus is rarely observed in buffaloes (Salunke *et al.*, 2001; Kumaresan *et al.*, 2003) and mare (Singh *et al.*, 2013). However, it is more common in cattle (Yadav, 2008). In hydrocephalus condition, there is dilation of ventricular system and subarachnoid space due to excessive accumulation of cerebrospinal fluid (Noakes, 2009). As a result of obstruction in free passage of cerebrospinal fluid in to the arachnoid space there is excessive swelling of cranial cavity during fetal development (Salunke *et al.*, 2001). Faulty embryonic development may be due to involvement of genetic, nutritional, and environmental factors (Kalman, 1989).

CASE HISTORY AND OBSERVATIONS

A 7-year-old Murrah buffalo in third parity with history of dystocia for last one day was presented to the Veterinary Clinical Complex, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar. Buffalo was bred with natural mating and 20 days were left to complete gestation. Patient was anorectic for one day with normal water intake. Per vaginal examination revealed cervix was completely dilated and fore limbs were engaged in birth canal. Further deep examination revealed that fetal head was excessively enlarged due to fluid accumulation. The fetal traction has already been applied in field conditions without any success.

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TREATMENT AND DISCUSSION

After epidural anesthesia with 4 ml of 2% lignocaine hydrochloride, fetal head membranes and skin were tear apart with embryotomy knife. It eventually resulted in escape of excessive fluid from fetal head, thereby reducing the size of head. Then, dead fetal monster was delivered with gentle traction after applying obstetrical chains on both forelimb and an eye hook on ruptured forehead (Fig. 1A). Fetal monster showed dwarfism, anophthalmic with thinning of parietal and temporal bones of skull whereas frontal bones were missing (Fig. 1A and B).

Similar findings have also been documented by Patil et al., 2008, Yadav et al., 2008 and Upasana et al., 2012. Post operative treatment for five days was given with inj. Ceftiofur + Tazobactam @ 1.125 mg intramuscular (IM), inj. Flunixin meglumine 15 ml (80mg/ml) IM, inj. chlorpheniramine maleate 10 ml and inj. Ascorbic acid 20 ml IM. Uterine ecobolic and calcium gel were given orally for 10 days. Animal recovered uneventfully.

Hydrocephalus is a congenital disorder which may be associated with hydroamnion, dwarfism and there is involvement of autosomal recessive gene (Roberts, 1971a). There is accumulation of cerebrospinal fluid either in ventricular system alone described as internal non-communicating type or as well in subarachnoid spaces which is known as communicating or external type (Sharma, 1996). Severe hydrocephalus condition results in dystocia which cannot be resolved by simple mutations (Roberts, 1971b).

CONCLUSION

Hydrocephalus fetus can be delivered after incising the apical soft portion of skull which reduces the size of head after escape of accumulated fluid.

CONFLICT OF INTEREST

None

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Fig. 1: (A) Incised apical soft portion of hydrocephalic head; (B) Hydrocephalus fetus.