

DYSTOCIA DUE TO FETAL MONSTROSITY IN A RIVERINE BUFFALO - A CASE REPORT

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ABSTRACT

A case of dystocia in a riverine buffalo due to posterior presentation of the fetal monster having micromelia, brachygnathism, rudimentary eye ball, narrow mouth opening, and edema of neck, face and head is reported and discussed here.

Keywords: *Bubalus bubalis*, buffaloes, brachygnathism, dystocia, micromelia, riverine buffalo, posterior presentation

defined as delayed or difficult to calving, sometimes requiring significant human assistance (Lombard *et al.*, 2007). In bovines, the incidence of dystocia is quite higher than other farm animal species. The incidence of monstrosities reported for cow is 0.5% (Craig, 1930) whereas an incidence of 7.9 to 12.8% has been reported for riverine buffalo (Singla *et al.*, 1992). The present case study reports per-vaginal delivery of fetal monster having micromelia, brachygnathism, rudimentary eye ball, narrow mouth opening, and edema of neck, face and head.

INTRODUCTION

Abnormalities of structure and function, which are present at birth, are obviously congenital deformities (Badaway, 2011). Congenital deformities can result from defective genetics or environmental factors or a combination of both and cause dystocia. The environmental factors include consumption of toxic plants by the dam and maternal-fetal viral infections during early gestation (Bendemkiran *et al.*, 2009). Dystocia is

CASE HISTORY AND OBSERVATIONS

A primiparous riverine Murrah buffalo with complete gestation period was brought to the university clinics with a history of difficulty in parturition since last 8 h. The case was attended by local paravet staff at field level. The animal was in standing position and active when referred to the university clinics. First of all, epidural anaesthesia was given between first inter-coccygeal space with 5 ml of 2% lignocaine hydrochloride. Upon proper

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lubrication of birth passage using liquid paraffin, per-vaginal examination revealed fully dilated cervix and dead fetus in posterior presentation. Both the hind limbs were amputated just above the level of hock joints and traction had been applied with the failure to deliver the fetus.

TREATMENT AND DISCUSSION

Fetal evisceration was carried out after guarded incision in umbilical region of the fetus. Loop of obstetrical chain was applied over

lumbar region of the fetus and gentle traction was applied. Consequently, a dead microcephalic fetus (Figure 1) was delivered. On the basis of external genitalia, sex of monster was female. The fetus had micromelia, brachygnathism, rudimentary eye ball, narrow oral opening and edema of neck, face and head (Figure 2), hence referred as 'monster'.

Following fetal delivery, the animal was treated with Inj. Oxytocin 50 I.U in 500 ml Normal saline I.V. once, Inj. Pheniramine maleate 227.5 mg I.M for 5 days, Inj. Calcium-magnesium-boro-gluconate 450 ml slow I.V. once, Inj. Cefoperazone plus sulbactam -4.5 gm I.M for



Figure 1. Microcephalic fetus.



Figure 2. Microcephalic fetus with micromelia.

5 days, Inj. Flunixin meglumine 1000 mg I.V. for 5 days, Inj. Metronidazole 2500mg I.V for 3 days, Inj. Normal saline solution 1 Litre I.V for 3 days and Inj. Dextrose normal saline (Dextrose 5%) 2 litres for 3 days. The dam recovered without any post-partum complication.

Brachygnathism or parrot mouth refers to a condition in which mandible is shorter than maxilla (Kahn, 2010) and is a craniofacial defect caused by homozygous recessive gene with incomplete penetrance. Jones and Hunt (1983) stated that many congenital anomalies are essentially unknown; however, the important known causes are prenatal infection with a virus, poisons ingested by mother, vitamin deficiency (A and folic acid), genetic factors and/or combination of these factors. Dystocia due to monstrosity is usually relieved by caesarean section or fetotomy, but in the present case per-vaginal delivery could possible due to complete dilation of cervix and less manipulation at the field level.

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