

BUFFALO MONSTER WITH CRANIOSCHISIS AND ANOPHTHALMIA

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SUMMARY

The delivery of a buffalo monster with double teratological defects i.e. cranioschisis and anophthalmia was reported through caesarean section.

Key words: Anophthalmia, buffalo monster, caesarean section, cranioschisis

Fetal developmental anomalies occur due to genetic and non-genetic defects associated with recessive genes (Roberts, 1986). Obstetrical management of bovine monstrosities is either through fetotomy or caesarean section. The present communication records double teratological defects in a buffalo monster.

A three and a half year's old Murrah buffalo in first parity with the history of rupture of water bag about 20 hrs before the case was presented to the clinic. Per-vaginum examination of buffalo after employing epidural analgesia revealed a dead fetus in anterior longitudinal presentation, dorso-sacral position with lateral deviation of neck. Manual manipulations were tried but failed to deliver the fetus. Therefore, caesarean section was performed under local analgesia and a dead monster was removed. The fetal head exhibited absence of eyes (anophthalmia) and duplication of lower jaw (Fig 1.). The latter was characterized by a portion of completely developed jaw while the other jaw lacked bony structure (Fig 1. inset). Cranioschisis was characterized by a 6 cm slit on the dorsal surface of skull (catlin mark, Fig 1.) through which cerebral contents were protruding. These teratological defects have been described as cranioschisis (Roberts, 1986).

Such type of congenital anomalies of fetus occur due to failure of embryonic anatomic fusion (Roberts, 1986). Catlin mark in the skull develops as a result of failure of ossification in frontal region of skull (Mupparapu *et al.*, 2006). Anophthalmia and lower jaw duplication are inherited teratological defects which



Fig 1. Cranioschisis with anophthalmia in a buffalo calf.

develop from a single area of embryonic disc (Roberts, 1986). Bovine monsters with catlin mark and cranioschisis have been reported earlier by Shivaprakash and Usturge (2004) and Honparkhe *et al.* (2010). However, these seems to be no report in the literature on monsters with cranioschisis and anophthalmia in bovines.

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