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Short Communication

DYSTOCIA IN ZEBU CATTLE DUE TO PEROSOMUS ELUMBIS – A CASE REPORT

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ABSTRACT: A Zebu cattle aged 12 years was presented in Teaching Veterinary Clinical Complex, Himachal Pradesh Krishi Vishvavidhyalaya, India with a history of continuous straining for last 24 hours. Per vaginal examination revealed that cervix was incompletely dilated and indurated and the fetus was a monster, so caesarean section was done. The animal was recovered following caesarean section.

Key words: Perosomus elumbis, Zebu cattle, Dystocia, Caesarean section.

Congenital anomalies are reported to be encountered in domestic animals that are present at birth, which in turn may cause obstetrical problems (Arthur *et al*. 2001). Perosomus elumbis is a monster characterized by partial or complete agenesis of lumbo-sacral and coccygeal regions of spinal cord accompanied by posterior bimelic arthrogryposis *i.e.* ankylosis of joints with associated malformations of the musculature (Son 2008, Gentele and Testoni 2006, Buck *et al.* 2009). This condition is commonly found in ruminants and swine. The primary abnormalities are hypoplasia and/aplasia of the spinal cord of the fetus which ends in the thoracic region. The regions of the body including the hind limbs, which are normally supplied by the lumbar and sacral nerves exhibit muscular atrophy and joint movement not develops (Arthur *et al*. 2001). The conspicuous feature for the obstetrician is the rigidity of the posterior limbs (Noakes *et al*. 2009). The present communication represents the successful recovery of zebu cattle with dystocia following caesarian section.

Case Details

A Zebu cattle aged 12 years was presented in Teaching Veterinary Clinical Complex, CSKHPKV, India with a history of continuous straining for last 24 hours and water bag had appeared at vulva 16-18 hours back without any progress of delivery. Per vaginal examination, revealed that the cervix was incompletely dilated and indurated in nature. Fetus with posterior longitudinal presentation with immovable hind limbs was palpable. Repulsion and deeper exploration exhibited abnormal size of the fetus. As the fetus was a monster and cervix was incompletely dilated, caesarean section was performed. Pre-operative therapy was advocated with Normal saline (2 litres) by intravenous route followed by Dexamethasone 40 mg, Haemostrypticum 20 ml, total dose (Revici®, Kee Pharma, India) intramuscularly. Local anesthesia was given with paravertebral block i.e. T13 to L3, by using 2% lignocaine hydrochloride (LOX®, Neon Labs, India). The left paramedian laparohysterotomy was performed after restraining the animal in right lateral recumbency. The uterus, peritoneum, muscle and skin were sutured in the routine manner. As a part of postoperative therapy, cow was administered Ceftriaxone sodium @ 10 mg/kg b.wt. twice a day (Intacef® 3.0, Intas Pharma, India), Meloxicam @ 0.2mg/kg IM (Melonex®, Intas Pharma, India) for 5 days. The fluid therapy was provided with Ringer's Lactate (5 litres), Normal saline (3 litres), Calcium magnesium borogluconate at a dose of 1.5 ml/kg body wt. (Mifex®, Novartis Pharma, India) by intravenous route along with Belamyl @ 10 ml intra muscularly a.d for 5 days. Antiseptic dressing was performed every alternate day by using Povidone Iodine. The sutures were removed after 10 days of the caesarean section.

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Fig. 1. Perosomus elumbis in Zebu calf.

Gross examination of the fetus revealed a dead male monster. Partial agenesis of the sacral and lumbar vertebral column and lack of rigid skeletal support in this area with strongly underdeveloped hindquarters described it as a Perosomus elumbis condition (Jones 1999). The monster had a small, flattened and deformed pelvis with strongly ankylosed and flexed hind limbs and muscular atrophy of the rear quarters (Roberts, 2004). Both hind and fore limbs were completely flexed and ankylosed (Fig. 1). Gentele and Testoni (2006) also observed that these monsters have underdeveloped musculature of hind quarters accompanied by rigid skeletal support in lumbosacral region in cattle. The pelvic bones were present but hypoplastic. Atresia ani was also indicating a developmental defect of the caudal neural tube, notochord, paraxial and intermediary mesoderm (Buck *et al.* 2009).

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