

DYSTOCIA DUE TO *Perosomus elumbis* MONSTER FETUS IN A JERSEY CROSSBRED COW

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Abstract: A pleuriparous Jersey crossbred cow was presented with the history of severe straining since 6 hours and the waterbag was ruptured. Pervaginal examination revealed both the hind limbs were in the birth passage. After thorough lubrication of the birth passage with steady traction the fetus was delivered pervaginally. Gross examination of the fetus revealed that the condition was *Perosomus elumbis*.

Keywords: Dystocia, congenital anomaly, Jersey crossbred cow.

INTRODUCTION

The most common cause of dystocia in cattle and buffalo include fetal monstrosities and malformation of fetuses (Shukla *et al.*, 2007). *Perosomus elumbis* is a fetal monster characterized by lack of vertebrae and spinal cord caudal to the thoracic region. The altered fetuses are characterized by having a small flattened deformed pelvis with strong ankylosios, flexed hind limbs and atrophy of the muscles in hind quarters (Roberts, 2004 and Son *et al.*, 2008). *Perosomus elumbis* is seen mostly in cattle and pigs (Noakes *et al.*, 2009). The present report records a case of typical *Perosomus elumbis* fetus in a Jersey crossbred cow and its successful management by obstetrical procedure.

CASE HISTORY AND CLINICAL OBSERVATION

A full term Jersey crossbred cow in its third parity was brought to the large animal obstetrics unit with the history of waterbag ruptured 6 hours before and having severe and continuous straining but unable to deliver the fetus. General clinical examination revealed all the parameters were within the normal limit. Vaginal examination revealed that the cervix was fully dilated with fetus was in posterior longitudinal presentation, dorso-sacral position with the limbs in the birth canal. On careful palpation it was found that the fetal hind limbs were ankylosed and the fetus was not having any reflex. Based on the clinical examination it was decided that the dystocia might be due to an abnormal fetus.

TREATMENT AND DISCUSSION

The cow was stabilized with fluid therapy, antibiotic, anti-inflammatory and antihistamine. The caudal epidural anesthesia was induced with 5ml of 2% Lignocaine hydrochloride at the first intercoccygeal space. Saturated warm saline solution was infused into the uterus to aid lubrication. Snares were applied on the fetlock joint of both the hind limbs. By combination of mutation and forced traction a dead male fetus was delivered pervaginally. Gross examination of the fetus revealed small, flattened, deformed pelvis with strongly ankylosed and flexed fore and hind limbs and atrophy of the muscles of the rear quarters (Fig.1). Radiographic examination of the fetus revealed marked ventral curvature of thoracic vertebral column (Fig. 2) and lack of vertebrae and spinal cord caudal to the thoracic region (Fig. 3). Based on these observations it was confirmed as *Perosomus elumbis* anomalous fetus. Most of the monster fetuses were delivered by either fetotomy or caesarean section or combination of fetotomy and traction (Testoni *et al.*, 2005). In the reported case, the fetus was smaller in size and thorough lubrication with fetal fluid replacement resulted in pervaginal delivery of *Perosomus elumbis* fetus by simple traction alone (Arunpandian *et al.*, 2021).

Perosomus elumbis is an inherited defect and lethal condition (Agerholm *et al.*, 2014). The accurate etiology is still unknown. Malformation or improper migration of the neural tube during the tail bud stage accompanied by partial agenesis of the caudal spinal cord resulted in development of this type of anomaly. Abnormal development usually occurs when a threshold of genetic and environmental insults is attained and the fetal compensatory mechanisms are overcome (Rousseaux and Ribble, 1998).

		
Fig.1 <i>Perosomus elumbis</i> monster fetus	Fig.2 Ventral curvature of thoracic vertebral column	Fig. 3 Absence of the lumbar, sacral and coccygeal vertebrae

CONCLUSION

Successful pervaginal delivery of *Perosomus elumbis* fetus in a Jersey crossbred cow by simple traction has been reported.

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