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Successful management of dystokia due to *Perosomus* horridus fetal monster in a crossbred jersey cow

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Abstract

A five year old crossbred Jersey cow was presented to veterinary clinical complex, C.V.Sc & A.H, OUAT, Bhubaneswar with a history of full term pregnancy and straining since last twenty four hours. After attempts for per-vaginal delivery became futile, the fetus was removed by C-section. Radio graphical examination revealed presence of double S shaped vertebral column suggesting *Perosomus horridus* fetal monster. The present study describes the successful management of dystokia due to *Perosomus horridus* fetal monster in a crossbred jersey cow.

Keywords: Crossbred jersey, dystokia, management, Perosomus horridus

Introduction

Fetal monstrosities and anomalies involve malformation of fetus and are common causes of dystocia in cattle. Fetal anomalies such as schistosoma reflexes, *Perosomus elumbis*, and *Perosomus horridus*, conjoined monsters, amorphous Globus's and cyclopean have been recorded in domestic animals. *Perosomus horridus* is a fetal monster, characterized by multiple bending of spine from occiput to the sacrum giving "S" shape curve. It is a congenital anomaly of unknown origin reported rarely bovine and caprine [4]. There is paucity of literature regarding *Perosomus horridus* monstrosity causing dystocia in cow. The present report describes successful management of a case of *Perosomus horridus* monster relieved by caesarean section in a crossbred Jersey cow.

Case history and observations

A multiparous crossbred jersey cow suffering from dystocia was presented to veterinary clinical complex of C.V.Sc & A.H, OUAT, Bhubaneswar. The cow was straining since 24 hrs and handled by a local veterinarian, who failed to deliver the fetus. Clinical examination revealed, the cow was dull and depressed with all vital parameters within normal range. After thorough lubrication, pervaginal examination revealed a completely relaxed cervix with the presence of all the four limbs and tail in the birth canal. Epidural anaesthesia, 5ml of 2% Lignocaine hydrochloride was injected. As the birth canal was completely dry, near about 6 liter of Carboxy methyl cellulose gel was prepared and introduced into the birth canal, which act as a fetal fluid replacer. Since, limbs were creating obstacle in the birth passage they were repelled back deep in to the uterine cavity. Due to ankylosis of joints it was very difficult to differentiate the forelimbs from hind limbs. All the traction force given to remove the fetus became futile. So decision was taken for caesarean section in the cow.

Treatment and Discussions

Caesarian section was performed in left lower flank under local and epidural anesthesia following standard procedure ^[4]. A dead fetal monster weighing 9 kg was delivered. The animal was treated postoperatively with antibiotics (I.V), Fluids (DNS and RL), anti-inflammatory (I.M) and antihistaminic (I.M) for seven days. The cow had an uneventful recovery.

The detailed examination of monster fetus revealed both the forelimbs and hind limbs were shorter with marked ankylosis of joints. The neck was stiff and fixed so that head was immovable. Radio graphical examination revealed presence of double 'S' shaped vertebral column suggesting *Perosomus horridus* fetal monster (Fig. 1 and Fig. 2). Postmortem examination revealed grossly all the internal organs were normal.

Incidence of monstrosities in livestock is of great importance because of genetic transmission of such malformation. Etiology of such monsters is usually unknown but considered to be due to chromosomal defects [2]. Incidence of monstrosities in livestock is of great importance because of genetic transmission of such malformation. Perosomus horridus is formed due to simple autosomal recessive gene. IL-6 is a constitutively expressed cytokine during gestation and that pathologic levels of IL-6 can cause a terminal state of EMT and inflammation, leading to adverse pregnancy outcomes [6, 9]. The affected monster fetus is usually carried to term and causes dystocia due to curved spine and mal alignment of extremities and they often die during delivery or soon after their birth [7, 8, 10, 11]. In the present case, the foetus exhibited all the malformations of Perosomus horridus monster as described by Roberts (1971) [5] in cattle. Balasubramanian et al. (1995) [1] and Napoleon et al. (2008) [3] had reported per vaginal delivery of Perosomus horridus fetal monsters in goat and buffalo, respectively. On the contrary, in the present case per vaginal delivery was unsuccessful and the fetus was removed by Caesarian section.



Fig 1: Photograph showing the Perosomus horridus fetal monster



Fig 2: Photograph showing the double 'S' shaped vertebral column

Conclusion

A case of dystokia due to *Perosomus horridus* Fetal Monster in a Crossbred Jersey Cow is successfully treated.

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