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DYSTOCIA DUE TO FETAL MALDISPOSITION AND MALPRESENTATION IN A NAGALAND MITHUN (*Bos frontalis*)

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KEYWORDS

Mithun

Maldisposition and
malpresentation

Caesarean section

ABSTRACT

This short communication of a case report of dystocia in a pluriparous Nagaland mithun strain was due to fetal maldisposition and malpresentation. Severe left lateral deviation of head and neck and dorso-pubic-anterior presentation of the fetus caused the maldisposition in Nagaland mithun strain. It was successfully removed with caesarean section and the animal recovered uneventfully.

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1 Introduction

The mithun is a unique bovine found in some of the North Eastern states and are four particular strains in Indian sub-continent namely Nagaland, Arunachal, Mizoram and Manipur strain. A small number of mithun is reported in neighbouring countries such as Bhutan, Myanmar, Yunnan province of China and Bangladesh and believed to be a descendent of wild gaur (Simoons, 1984). In general, mithun is reared in free-range system as the traditional practice and the mithun farmers/owners rear their mithun in the village community jungles and forest in group or herd. In general, no reproductive problem was reported in the free ranging mithun rearing forest areas, but some reports were observed in the semi-intensive mithun farm (Perumal et al., 2012; Perumal et al., 2013a; Perumal et al., 2013b). Deviation of the neck and head are very common group of abnormal posture in anterior presentation resulting difficult in birth in different livestock animal species (Roberts, 1971).

The present abnormal deviation may be observed and corrected in any directions and lateral deviation of the neck and head is reported very commonly in unipara and the prognosis of these types case is very serious especially when the deviations are due to muscle contractures and the fetus is dead in bovine species (Sane et al., 1994). The reproductive problem such as dystocia is very rare in this bovine species when compared to other bovine and bubaline species and moreover no such report was observed regarding the dystocia in this precious species and its successful management using caesarean section. Therefore the present case report keeps on record a case of dystocia due to lateral deviation of head and neck and dorso-pubic-anterior presentation and its management in Nagaland mithun strain.

2 History and clinical examination

A Nagaland mithun of age 6 year was attended at Porba village, Phek District, Nagaland with a history of reduced feed intake, discomfort and a soiled white cord hanging from vagina. The respiration, temperature and pulse were slightly increased. Drooling of saliva from mouth and dry muzzle and congested conjunctival mucus membranes were observed in the present case. Birth canal was dry and oedematous, a fully dilated cervix with hard in consistency and the foul smelling foetal fluids were observed through per-vaginal examination.

The foetus was in dorso pubic position with anterior longitudinal presentation with severe lateral deviation of neck and head and the dead fetus was diagnosed. Finally the case was diagnosed as severe fetal dystocia because of dorso-pubic-anterior presentation and severe left lateral deviation of neck and head based on per rectal and per vaginal examination. Fertile and hard attempts were done to relieve the fetus using mutational operation, but no fruitful result. Therefore the caesarean section was performed to relieve the fetus.

3 Treatments and Discussion

Epidural anaesthesia (2% Lignocaine HCl; 7 ml) was given followed by the animal was properly restrained in right lateral recumbency and left lower flank was prepared for caesarean section. 2% lignocaine HCl was for local infiltration and caesarean section completed as per prescribed surgical protocol. A male dead emphysematous fetus was removed with affected fetal membranes from the uterus in the section. Surgical site was properly closed and dressed with care as per standard surgical procedure. General post operative care was provided and the uneventfully animal was recovered.

In this case report, the fetal mal-disposition and mal-presentation resulted dystocia, improper and lack of timely intervention leads to fetal death and finally emphysema. Johanson & Berger (2003) reported 49% of perinatal mortality was related with unassisted births/delivery. Following death of fetus within 1-3 days, there was invasion of microorganisms from the lower reproductive tract (vagina) resulted dead foetuses with emphysema (Purohit & Mehta, 2006). Similarly, in the present case report, the fetus was emphysematous, uterine wall contracted around the fetus, the vaginal canal was dry and the vaginal discharge was foetid and watery.

All these observation indicated that death of foetal would have occurred from 1 to 3 days prior to the surgical caesarean section. The fetal mal-dispositions were associated with emphysema of the foetus, deep incision on the foetus to release the gas and forced traction and partial fetotomy can relieve dystocia as in the present study (Purohit et al., 2012; Perumal et al., 2013c). In the present dystocia case report, caesarean section was performed because other fertile attempts failed to relieve/correct the dystocia and further the health of the dam was determined as fair to withstand caesarean section.

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Conflict of interest

Authors would hereby like to declare that there is no conflict of interests that could possibly arise.

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