International Journal of Science, Environment and Technology, Vol. 5, No 2, 2016, 479 – 481
ISSN 2278-3687 (O)
2277-663X (P)

REPORT ON BOVINE DYSTOCIA DUE TO CONGENITAL BREECH PRESENTATION OF A HYDROCEPHALUS

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Abstract: A very rare case of Hydrocephalus calf in a crossbred Holstein Frisian cow from the rural area of Theni District in Tamil Nadu was reported. This report would help in drawing the attention of animal breeders of Theni with respect to collection of sire and dam's pedigree information before breeding of their cattle as the condition is hereditary in nature.
Keywords: Dystocia, Hydrocephalus calf, Holstein Frisian cow.

INTRODUCTION

Foetal anomalies and monstrosities of various types have been recorded in bovines (Noakes *et al*., 2001; Roberts, 2004) and Buffaloes (Singh *et al*., 2013). Foetal anomalies and monstrosities are the most common causes of dystocia in bovines (Shukla *et al.,* 2007). Hydrocephalus has been described both in cows (Buck *et al.*, 2009; Smolec *et al.*, 2010) and buffalo (Purohit *et al.*, 2006). There is accumulation of excessive fluid in the ventricles of the brain or dura matter. Hydrocephalus is either external or internal. In external hydrocephalus, (Vidya Sagar *et al*., 2010) fluids accumulate in the subarachnoid space exterior to the brain whereas in the internal hydrocephalus, (Kumaresan *et al*., 2003) fluids accumulate in the ventricles of the brain. Death of the foetus is due to pressure on vital centres of the brain. The frontal, temporal and parietal bones are usually involved becoming deformed, separated and thin. The condition does not affect foetal development but may result in death of the foetus at birth or soon after birth. In cattle, a simple autosomal recessive gene and autosomal dominant gene with incomplete penetrance has been known to be associated with hydrocephalus. In the present communication we describe bovine dystocia due to breech presentation of a hydrocephalus.

CASE HISTORY AND OBSERVATIONS

A primiparous crossbred Holstein Friesian Cow at full term in second stage of parturition suffering from dystocia due to foetal cause was referred to Technical staff of

*Received Feb 22, 2016 * Published April 2, 2016 * www.ijset.net*

Farmers Training Centre, Theni after preliminary treatment at field level. It was reported that the cow was straining since 6 hours, water bags have been ruptured and animal unable to deliver the foetus. Further, the cow was physically dull and exhausted. Per vaginal examination of a cow shown that the foetus in posterior longitudinal presentation and dorso-sacral position without any foetal movements and other reflexes.

TREATMENT

The foetus was delivered by applying repulsion and traction methods. After delivery of dead calf a hydrocephalus noticed in dorsal side of head of dead calf. These results come in agreement with (Narari, J., 1996) who reported hydrocephalus and showed the cause results of obstruction of the ventricular system during a critical stage of embryonic development, result death of foetus.

CONCLUSION

Pedigree record of sire and dam is always necessary and an important aspect of breeding of animals. That will help in minimizing the occurrence of foetal anomalies which arises primarily due to some genetic defect.

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