

DYSTOCIA DUE TO BULL DOG CALF IN A MURRAH BUFFALO HEIFER

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Received: 17 December 2019

Accepted: 21 December 2021

ABSTRACT

A rare case of dystocia due to bull dog calf in a Murrah buffalo heifer was presented at Teaching Veterinary Clinical Complex, Narendra Dev University of Agriculture and Technology, Kumarganj, Ayodhya with the history of 8 months pregnancy, restlessness, reduced feed and water, continuous straining and labor pain. The bull dog calf was delivered per-vaginum successfully under epidural anaesthesia with 2% xylocaine hydrochloride.

Keywords: *Bubalus bubalis*, buffaloes, bull dog, calf, dystocia

INTRODUCTION

Teratological development of ovum may result in the death or malformation of antenatal individuals resulting in dystocia (Roberts, 1971). Fetal anomalies and monstrosities are the most common causes of dystocia in bovines (Shukla *et al.*, 2007; Shukla and Chauhan, 2004). It is believed

that fetal anomalies occur due to factors affecting the fetus during early stages of the development. Various types of fetal anomalies and monstrosities have been reported in bovines leading to dystocia (Debasis and Ghosh, 2002; Shukla and Chauhan, 2004; Sani *et al.*, 2010). The present paper deals with a case of dystocia due to bull dog calf in a Murrah buffalo heifer.

CASE HISTORY AND CLINICAL OBSERVATION

A 4 years old buffalo heifer was presented to college polyclinic with the history of 8 months of pregnancy, restlessness, reduced feed and water intake, continuous straining and labour pain since last 8 h. Water bag had ruptured 3 h before and animal was unable to deliver fetus. The

animal was dull, depressed and exhausted due to severe straining. Per-vaginal examination revealed fully dilated cervix with dry birth canal and fetus was in anterior longitudinal presentation and dorsosacral position. Fetal movement and other reflexes were absent and hence dead fetus

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was confirmed. On gross examination the enlarged fetal head near the pelvic brim was felt. On the basis of history, clinical examination, per-rectal examination and per-vaginal examination, the case was tentatively diagnosed as dystocia due to bull dog calf.

TREATMENT AND DISCUSSION

Before obstetrical operation for relieving dystocia the animal was treated with inj. Dextrose 5% (4 lit IV), inj. RL (4 lit IV), inj. Cortisone (5 ml IM), inj. Ceftriaxone (4 gm IM), inj. Anistamin (10 ml IM) and inj. Meloxicam (15 ml IM). Posterior epidural anaesthesia was given by using 2% Xylocaine hydrochloride. Birth canal and fetus was properly lubricated with the help of sterilized liquid paraffin. Obstetrical snare was fastened in the neck and forelimbs of the fetus separately and dead fetus was delivered through forced traction. On gross examination, fetal head could be seen at the vaginal passage near to vulvar lips and no fetal limbs were seen. The fetus was characterized as "Bull dog" calf (Figure 1). The fetus was fully developed. The skin was fully developed all over body but there were no hairs on the skin. It had bulging forehead with normal trunk and abdomen. The lower jaw was slightly larger than upper jaw. The fore and hind limbs were normal. Autopsy of the fetus showed normal internal organs. After obstetrical operation the dam was administered with inj. Calcium borogluconate (450 ml IV), inj. Ceftriaxone (4 gm IM), inj. Melonex (15 ml IM) and inj. Oxytocin (30 IU IV). The fetal membranes were expelled out after 5 h of delivery of fetus and the dam was recovered uneventfully.

Congenital anomalies causing dystocia have been well documented in buffaloes (Shukla

et al., 2007). Dystocia due to bull dog calf though uncommon has been reported in cow Kumbhar *et al.*, 2011) and buffaloes (Shukla *et al.*, 2007; Pandey *et al.*, 2010; Prabakaran *et al.*, 2013). Occurrence of bull dog condition is a rare condition (Noakes *et al.*, 2009; Roberts, 2004) and may occur due to disturbance of endochondral ossification that may lead to defect in bone development (Gentele and Testoni, 2006). A bull dog calf is a deformed fetus with compressed skull, flat head with a short nose and sloping fore head with short and stumpy limbs, a nose divided by furrows and a shortened upper jaw, giving a bull dog facial appearance (Noakes *et al.*, 2009). Bull dog calves may be confused with fetal anasarca in which there is accumulation of fluid in the subcutaneous tissues and body cavities (Arthur *et al.*, 1989; Roberts, 2004). However, in the present case no accumulation of fluid in subcutaneous tissue was observed thus possibility of anasarca was ruled out. Bull dog calf is generally considered to be due to a single, autosomal recessive defects with some modifiers (Roberts, 2004). However, in the present case no breeding records of the animal could be extracted from the owner because the animal was purchase 2 months back from a market. The bull dog calf was delivered by decapitation and by careful traction (Manoharan *et al.*, 2012). However, in the present case fetus was delivered by careful traction alone because of sufficient space in the birth canal and with no further complication to the dam.

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Figure 1. Photograph showing bull dog calf causing dystocia in a Murrah buffalo heifer.

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