

## DICEPHALUS FETAL MONSTER IN A MURRAH BUFFALO: A CASE REPORT

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### ABSTRACT

The successful delivery of a rare case of dicephalic fetal monster using forceful traction in a Murrah buffalo is reported.

**Keywords:** *Bubalus bubalis*, buffaloes, dicephalus fetal monster, forced traction

shows the correction of the fetal monster using different methods *viz.*, fetotomy, cesarean section and manual with different results. Manual delivery of dystocia due to dicephalus fetal monster in buffalo has been reported by several researchers (Bugalia *et al.*, 1990; Panchal *et al.*, 1990; Bhayani *et al.*, 1991). Thus, the present case deals with the successful removal of dicephalic fetal monster by manual traction through pervaginally in buffalo.

### INTRODUCTION

Dystocia is defined as the dam's difficulty to deliver its fetus and requires human assistance (Lombart *et al.*, 2007). The most common causes of dystocia in dairy animals, especially buffalo, are fetal anomalies and monstrosities. (Shukla *et al.*, 2007). A fetal monstrosity is a malformed fetus due to developmental abnormalities of the embryo, ovum or fetus. Monstrosities have been associated with either infectious disease or congenital defects which may or may not interfere with birth (Arthur *et al.*, 2001). The incidence of monstrosities varied from 7.9 to 12.8% in Murrah buffalo (Phogat *et al.*, 1992; Singla and Sharma, 1992). The report

### HISTORY AND CLINICAL EXAMINATION

A Murrah buffalo aged six-year-old in its third parity at a completed gestation was presented to the Veterinary Clinical Complex of the International Institute of Veterinary Education and Research (IIVER), Rohtak, Haryana with a history of dystocia. As per the owner, the animal started showing signs of calving for the past 12 h but there is no progression of parturition. The animal was also unsuccessfully handled by a local field veterinarian. The buffalo appeared to be alert, active, and in good health and its rectal temperature

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Figure 1. Dicephalus fetal monster showing two heads (White arrow) and two tails (Red arrow).

was 102.4°F. Vaginal examination revealed a fully dilated birth canal, an abnormal double head dead fetus in anterior longitudinal presentation, dorso sacral position with one forelimb extended in the vulva and other limb flexed in the shoulder joint.

## TREATMENT AND DISCUSSION

A 5 ml of local anesthesia (2% Lignocaine Hcl solution, Neon Lab.) was given epidurally to avoid the pain and straining. No electrolytes were given since the animal was alert, active and energetic. Following 10 minutes of anesthesia, full lubrication using liquid paraffin was done inside the uterus. Firstly, the flexed forelimb was corrected in the normal posture manually. This was followed by the application of obstetrical ropes around the lower part of the jaw and one of the fetal head was pulled out manually up to the vulva

while another fetal head was also corrected in the same way up to the vulva. Lastly, obstetrical ropes were snared around the two lower fetal limbs of the leg, the lower jaw of the head and traction was applied at the same time simultaneously to deliver the fetus. A dead female fetus was delivered. The gross appearance of the dead calf showed two fully developed heads in a single shoulder joint along with two tails in a single body which was a suggestive of dicephalic fetal monster (Figure 1). Post-delivery, four Nitrofurazone and urea pessary boli (Furex, Vetsfarma Ltd.) were kept inside the uterus pervaginally for cleaning the uterine debris and against uterine infection. The animal was treated with inj. Ceftriaxone and Tazobactam 5625 mg I/V (Intacef tazo, Intas Pharmaceuticals Ltd.), inj. Chlorpheniramine maleate 10 ml I/M (Avil, MSD Animal Health), inj. Flunixin meglumine 20 ml I/M (Megludyne, Virbac Animal Health India Pvt Ltd) and inj. Tribivet 10 ml I/M. The placenta

was expelled within 30 minutes of the post-delivery of the fetus. Antibiotics, anti-inflammatory drugs and vitamin were administered for another 5 days. On 12 days follow-up, the animal was completely recovered. Dicephalus, conjoined twins causing dystocia is uncommon in bovines (Hannappagol *et al.*, 2005). Conjoined twins are caused by a variety of factors that are influenced by genetic and environmental factors. It is believed that these factors are responsible for the failure of twins to separate after the 13<sup>th</sup> day post-fertilization (Rai *et al.*, 2018). Dicephalus monster has been reported in cows (Chauhan *et al.*, 2012), goats (Pandit *et al.*, 1994) and buffaloes (Kumar *et al.*, 2014). The fetal monster in the present case appears to be non-hereditary in origin since the animal had a history of delivered three normal calves in the last three calvings. The manual correction of dystocia in the case was done as the animal is in good condition as well as sufficient space inside the birth canal. Similarly, manual correction of dicephalus monster was also reported in buffalo (Khan *et al.*, 2007; Khasatiya *et al.*, 2008).

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