# DYSTOCIA DUE TO DICEPHALIC DIPUS DIBRACHIUS MONSTER IN A MURRAH BUFFALO

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## ABSTRACT

A four year old Murrah buffalo at full term in second parity suffering from dystocia was presented to the Veterinary Clinical Complex and the fetal monster was delivered by caesarean section. The fetus was Dicephalic dibrachius dipus dicaudatus along with partial duplication of spine.

**Keywords**: *Bubalus bublis*, buffaloes, caesarean section, Dicephalalus dipus dibrachius dicaudatus, fetal monster

## INTRODUCTION

Dystocia due to conjoined twin monster is uncommon (Dhami *et al*., 2000; Hannappagol *et al*., 2005). Congenital duplication can be defined as incompletely separated monozygotic twins with subsequent malformations ranging from partial duplication of one part of the body up to the almost total formation of two fused foetuses (McGirr *et al*., 1987). The etiology of many congenital anomalies are essentially unknown; however, the important known causes are prenatal infection with a virus, teratogens ingested by mother, vitamin deficiency (Vit-A and folic acid), genetic factors and/or combination of these factors (Jones *et al*., 1983). The zygote (<14 days) is susceptible to genetic mutations and chromosomal aberrations. During the period of embryonic development (day 14 to 42 days), the embryo is highly susceptible to teratogens, and the effect decreases gradually as the embryo matures to the foetus (Morrow *et al*., 1986). The conjoined twins were reported with two separate heads (Dicephalus), two fore limbs(Dibrachius), two hind limbs (Dipus), and two tails (Dicaudatus) (Roberts, 1971). Duplication of the cranial part of the fetus is more common than caudal parts (Roberts, 1971). The present case study reports a case of dystocia due to the Dicephalic dipus dibrachius dicaudatus fetal monster in a Murrah buffalo.

## CASE HISTORY AND OBSERVATIONS

A four years old Murrah buffalo (OPD No. E-05-1086, dated 22.05.2019) at full term gestation

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in second parity was brought to Veterinary Clinical Complex, LUVAS, Hisar. The animal was recumbent and straining for the last six hours. The water bags had already ruptured. On per vaginal examination, it was observed that the cervix was incompletely dilated and fetus was in transverse presentation therefore the decision of caesarean section was taken.

## TREATMENT AND DISCUSSION

The animal was casted in right lateral recumbency and left lower flank site was prepared for cesarean section. A 12 inch long skin incision was made and all the layers of abdominal wall were incised. Omentum was reflected cranially to expose the gravid uterus which was incised at its greater curvature between rows of caruncles and the dead male fetal monster was removed. Uterine incision was closed by Cushing followed by Lambert suture pattern using chromic catgut No. 3. The abdominal muscles were sutured in routine manner by interlocking suturing pattern using chromic catgut No. 3 and skin incision was closed using silk No. 3 by applying simple horizontal interrupted sutures. Gross examination of fetus revealed presence of two heads, four limbs with two tails (Figure 1 and Figure 2).

The animal was treated with Inj. Evatocin 10 ml (Oxytocin; Neon laboratories) in 1 liters of Normal saline IV; Inj. Dexona (Dexamethsone; Zydus AHL) 10 ml IM, Inj. Dextrose Normal Saline (Dextrose 5%; Fresenius Kabi) 4 litres IV, Inj. Mifex (Calcium-magnesium-boro-gluconate; Novartis India Limited) 450 ml IV, Inj. Cefwell forte (Cefoperazone plus sulbactum; Macwell pharma) 4.5 g IM, Inj. Avil (Chlorpheniramine maleate; MSD Animal Health) 10 ml IM, Inj. Megludyne (Flunixin meglumine; Virbac Animal Health India Pvt Ltd.) 15 ml IM, Inj. Tcee (Ascorbic acid; Titanic Pharmaceuticals Pvt. Ltd) 30 ml IM and Inj. Metrogyl (JB Chemicals; Metronidazole 5000 mg/1000 ml) IV. Excluding Inj. Mifex and Inj. Dexona , rest of the treatment was advised for 5 days and owner was advised to get remove sutures after 12 days. The animal recovered without any post-partum complication.

Fetal dystocia is a condition in which there is an abnormal size of fetus or position which results into difficult calving. It is a leading cause for major losses among high producing animals like cattle and buffalo due to large numbers of abortion cases occurring routinely. There may be 2 to 23% of cows in a herd that require farmer or veterinarian assistance in difficult calvings (Mee, 2008). Double-headed calf represents a case of absolute fetal monstrosity with subsequent provoke of dystocia in animals. Such condition could be resolved through a fetotomy or caesarean section (Long, 2009). Conjoined twins result from incomplete subdivision of embryonic axis that occurs at a relatively later phase of development (Ravikumar *et al*., 2012). Similar cases reported in the cow (Chauhan *et al*., 2012; Praharaj *et al*., 2015; Singh *et al*., 2018; Dutt *et al*., 2018; Dutt *et al*., 2019). The animals subjected to caesarean have been found to have lower survival rate (45.1%) as compared to those with/without partial fetotomy (Singh *et al*., 2013).

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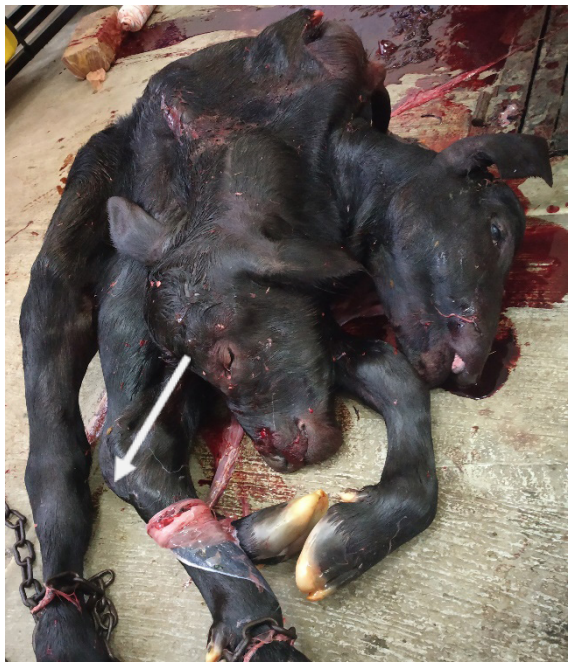

Figure 1. Dicephalus fetus with normal limbs.

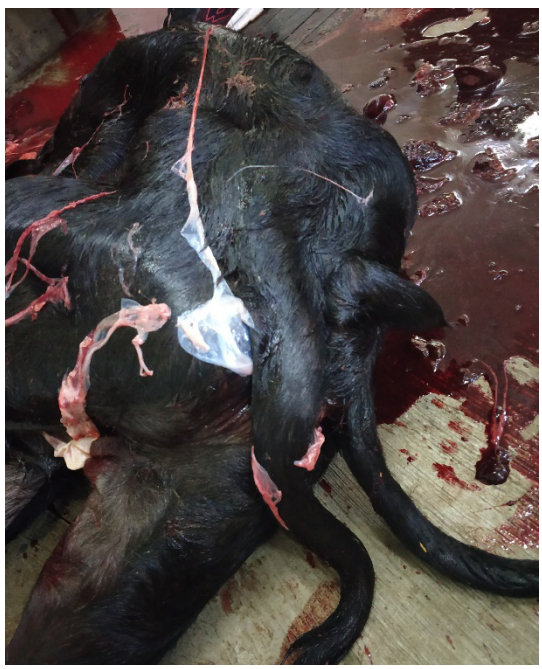

Figure 2. Dicephalic fetus with dicaudatus.

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