



## SUCCESSFUL MANAGEMENT OF DYSTOCIA DUE TO DICEPHALUS FETAL MONSTER IN A MURRAH BUFFALO

<sup>1\*</sup>Gyan Singh, <sup>2</sup>Ravi Dutt, <sup>3</sup>Vinay Yadav & <sup>3</sup>Shivanagouda S Patil

<sup>1</sup>Department of Veterinary Clinical Complex, LUVAS, Hisar-125004 (Haryana)

<sup>2</sup>Department of Veterinary Gynaecology and Obstetrics, LUVAS, Hisar-125004 (Haryana)

<sup>3</sup>Department of Veterinary Gynaecology and Obstetrics, LUVAS, Hisar-125004 (Haryana)

\*Corresponding author email: vetgyansaini@gmail.com

### ABSTRACT

The present case report deals with the successful delivery of Dicephalus fetal monster through fetotomy in a Murrah buffalo.

**KEY WORDS:** Buffalo, Dicephalus, Dystocia, Fetotomy, Monster, Murrah.

### INTRODUCTION

Congenital bovine fetal anomalies can be due to heritable, toxic, nutritional, and infectious agents and may or may not interfere with birth (Sharma *et al.*, 2010; Gupta *et al.*, 2011). Although uncommon in most herds, inherited congenital anomalies are probably present in all breeds of cattle, and but reports in buffaloes are meager. In some herds, the occurrence of inherited anomalies has become frequent and economically important (Singh *et al.*, 2013). Fetal anomalies and monstrosities are common cause of dystocia in bovines (Shukla *et al.*, 2007) and are disturbances of development that involve the sexual organs and cause great distortion of the individual (Vegad, 2007). Abnormal duplication of germinal area in fetus will give rise to congenital fetal abnormalities with partial duplication of body structure (Robert, 2004). Varying degree of fusion occurs; but anterior duplications are more

seen in ruminants and swine (Arthur *et al.*, 2001). It is important to know various types of monstrosities in animals which usually cause dystocia and which cannot be easily removed and so demand caesarean section most of the time (Patil *et al.*, 2004; Sharma, 2006).

### Case history and clinical observations

A Murrah buffalo (OPD No. 4/10875, dated- 30.04.2018) in 3<sup>rd</sup> parity at full term with the history of dystocia was brought to Veterinary Clinical Complex. The animal was with inappetence and normal water intake for last one day. The case was handled at field level by local veterinarian and referred it with his diagnosis as conjoint twins. After epidural anaesthesia and proper lubrication with liquid paraffin per-vaginum examination revealed fully dilated cervix and fetus with double head. The final diagnosis was dystocia due to dicephalus fetal monster.



**FIGURE 1:** Diprosopus buffalo calf monster delivered by fetotomy

## TREATMENTS & DISCUSSION

Since, the animal was alert and in good condition, it was decided to deliver the dicephalus monster through fetotomy. One forelimb extended towards vulva was amputated from elbow joint and gentle traction was applied in both the eye sockets of one fetal head through long eye hooks and the same head was amputated using fetotome. Using obstetrical chain and eye hooks, traction was applied on second forelimb and fetal head, respectively. The dead fetus and fetal membranes were delivered by gentle traction. The trachea and esophagus of the monster were double and rest of the organs was normal. The animal was administered with inj. Oxytocin 10 ml IV in 500 ml NSS, inj. Ca-Mg-Borogluconate 450 ml slow IV., inj. Clotex (ethamsylate) 30 ml IV, inj. Cefwell forte (cefoperazone plus sulbactam) 4.5 gm IV, inj. FM-50 (Flunixin meglumine) 20 ml IM, inj. Avil (chlorpheniramine maleate) 10 ml IM, inj. Metrogyl (metronidazole) 500 ml IV and liq. placento (homeopathic drug) 30 ml P.O. Except Mifex, rest of the treatment was advised for next five days.

The fetus had two fully developed heads on single neck (Fig. 1). The neck, thorax, abdomen and limbs were grossly normal. Dicephalus monsters have been reported in goats (Pandit *et al.*, 1994), buffaloes (Chauhan and Verma, 1995; Raju *et al.*, 2000; Srivastava *et al.*, 2008; Singh *et al.*, 2013; Kumar *et al.*, 2014) and cows (Patil *et al.*, 2004; Abrahan *et al.*, 2007). Conjoined twins may be caused by any number of factors, being influenced by genetic and environmental conditions. It is presently thought that these factors are responsible for the failure of twins to separate after the 13th day after fertilization (Srivastva *et al.*, 2008). Thus the present case report describes delivery of dicephalus monsters in buffaloes by fetotomy. The technique is quite safer and less time consuming, it can be used successfully as an alternative to the caesarean operation.

## REFERENCES

- Abrahan, J., Bihu, S., Raj, V.I. and Lakshman, B. (2007) Dicephalic monstrosity in a heifer. *Indian J. Anim. Reprod.*, **28**(2): 109-111.
- Chauhan, K.S. and Verma, H.K. (1995) A case of dystocia due to diplopagus monster in buffalo. *Indian J. Anim. Reprod.*, **16**(1): 75.
- Gupta, V.K., Sharma, P. and Shukla, S.N. (2011) Dicephalus monster in a Murrah buffalo. *Indian Vet. J.*, **88**(12): 72-73.
- Kumar, P., Sharma, A., Singh, M., Sood, P. and Barman, P. (2014) Dystocia due to a dicephalus monster fetus in a buffalo. *Buffalo Bulletin*. **33** (1):13-15.
- Pandit, R.K., Pandey, S.K. and Aggarwal, R.G. (1994) A case of dystocia due to diplopagus monster in goat. *Indian J. Anim. Reprod.*, **15**(1): 82.
- Patil, A.D., Markandeya, N.M., Sarwade, V.B. and Moregaonkar, S.D. (2004). Dicephalus monster in a non-descript cow - a case report. *Indian J. Anim. Reprod.*, **25**(2): 161-162.
- Raju, K.G.S., Rao, K.S., Reddy V.S.C. and Sharma G.P. (2000). Dicephalus-biatlanticus monster in a buffalo. *Indian J. Anim. Reprod.*, **21**(1): 81.
- Robert, S.J. (2004). Veterinary Obstetrics and Genital Diseases. 2<sup>nd</sup> Indian reprints, CBS Publishers and Distributors, Delhi-110032.
- Sharma, A. (2006). Caesarean section in animals under field conditions: a retrospective study of 50 cases. *Indian Vet. J.*, **83**(5): 544-45.
- Sharma, A., Sharma, S. and Vasishta, N.K. (2010). A diprosopus buffalo neonate: a case report. *Buffalo Bulletin*. **29**(1): 62-64.
- Shukla, S.P., Garg, U.K., Pandey, A., Dwivedi D.P. and Nema, S.P. (2007). Conjoined twin monster in a buffalo. *Indian Vet. J.*, **84**: 630- 631.
- Singh, S., Pandey, A.K., Dutt, R., Sunder, S., p Kumar, S. and Chander, S. (2013). Delivery of a dicephalus sternopagus tetrabrachius tetrapus dicaudatus monster in a Murrah buffalo by caesarean section. *Buffalo Bulletin*. **32** (4): 242-244.
- Srivastava, S., Kumar, A., Maurya, S.K., Singh, A. and Singh, V.K. (2008). A dicephalus monster in Murrah buffalo. *Buffalo Bulletin*. **27**(3): 231- 232.
- Vegad, J.L. (2007). Textbook of Veterinary General Pathology, 2<sup>nd</sup> ed. International Book Distribution Company, Lucknow, UP, India. 544p.