



Per-Vaginal Delivery of Dicephalus Fetal Monster in a Buffalo (*Bubalus bubalis*)

Sanjeev Kumar Verma¹, Rajesh Kumar^{1*}, Saurabh², Kunwar Dhananjay Singh³, Abhishek Kumar¹

¹Department of Veterinary Gynaecology and Obstetrics

²Department of Veterinary Clinical Complex

³Department of Livestock Farm Complex

Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya-224229, UP, India

ABSTRACT

This case report documents a rare occurrence of a dicephalus fetus in a buffalo and its per-vaginal delivery through the obstetrical manoeuvre. The buffalo was recovered uneventfully.

Keywords: Buffalo, Dicephalus Monster, Dystocia, Fetus, Management

How To Cite: Verma, S. K., Kumar, R., Saurabh, Singh, K. D., & Kumar, A. (2024). Per-vaginal delivery of dicephalus fetal monster in a buffalo (*Bubalus bubalis*).

The Indian Journal of Animal Reproduction, 45(2),113-115, 10.48165/ijar.2024.45.02.24

INTRODUCTION

Congenital fetal anomalies as a cause of dystocia are uncommon and infrequently recorded in domestic animals (Singh *et al.*, 2020). Duplication of body parts can occur at both anterior and posterior parts, but duplication of cranial parts is more common as compared to caudal parts (Roberts, 1986). The congenital fetal abnormalities are ascribed to many reasons, viz. genetics and environmental factors (drugs, poisons, viruses, plants, mineral salts, and deficiency of vitamins (A, D, and E), which results in improper separation of a primitive streak after day 13 of fertilization (El-Sheikh *et al.*, 2010). Dicephalus is a congenital condition in which a newborn is born with two heads. A fetotomy or caesarean section is usually performed to resolve dystocia due to double head fetuses because they are typically large (Long, 2009). These kinds of congenital malformations are

extremely rare and have been documented in cattle (Salami *et al.*, 2011), buffalo (Shukla *et al.*, 2011; Singh *et al.*, 2022; Ramteke *et al.*, 2023), doe (Mukaratirwa and Sayi, 2006), and ewe (Monfared *et al.*, 2013). This communication reports a case of dystocia due to a Dicephalus fetus and its successful per-vaginal delivery using obstetrical manoeuvres.

CASE HISTORY AND OBSERVATIONS

A buffalo in first parity with dystocia at full term of gestation was presented at Veterinary Clinical Complex, College of Veterinary Science & Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Ayodhya, with the history of dystocia since 10h.

*Corresponding author.

E-mail address: drrajesh25@gmail.com (Rajesh Kumar)

Received ; 26.04.24 Accepted 26.04.24

Copyright @ The Indian Society for Study of Animal Reproduction

The case was unsuccessfully handled by a quack. Per vaginal examination, it revealed a fully dilated cervix and the fetus was in the anterior longitudinal presentation, dorso-sacral position with the extended fore limb in the birth passage. A careful vaginal examination revealed two heads with normal thorax and no fetal movement. On the basis of vaginal examination, the case was diagnosed as a dicephalic fetal monster, and it was decided to deliver per-vaginally with the application of obstetrical manoeuvre (Fig.1).

TREATMENT AND DISCUSSION

After administering 5 ml of 2% lignocaine HCl for epidural anaesthesia, sodium carboxymethyl cellulose gel was used to lubricate the birth canal thoroughly. One eye hook was applied to one eye of the first head. Similarly, a second eye hook was applied to one eye of the second head, and trac-

tion was applied alternatively to both eye hooks to draw the fetus. Obstetrical snares were placed on the forelimbs concurrently. The Dicephalus monster was delivered with controlled traction. A thorough inspection of the fetus showed that it was fully grown, with two heads and two necks that were divided at the thoracic vertebrae. There are two eyes and two ears on each head. The fetus was identified as a Dicephalus monster based on previous reports (Camon *et al.*, 1992). Following the birth of the fetus, routine antibiotics and supportive care were given systemically. There are several known forms of Dicephalus monster, a syndrome of embryonic duplication involving the head and sometimes the neck (Pandey *et al.*, 2010). Although a fetotomy or caesarian section has been seen to be effective in treating this condition, like the present case, Chandrahasan *et al.* (2003) also reported the successful pervaginal delivery of a dicephalic fetus with a judicious mutational operation.



Fig. 1: Dicephalic buffalo fetus

CONCLUSION

If attended promptly, dicephalic fetus can be delivered pervaginally using judicious obstetrical maneuver with plenty of lubrication of genital tract.

ACKNOWLEDGEMENT

The authors are thankful to Dean, C.V.Sc.&A.H. for providing facilities for the treatment of buffalo.

CONFLICT OF INTEREST

None

REFERENCES

- Camon, J., Sabate, D. Verdu, J. Rutllant, J. and Lopez-Plana, C. (1992). Morphology of a dicephalic cat. *Anat. Embryol. (Berl)*. **185**(1): 45-55.
- Chandrasekhar, C., Krishnakumar, K., Selvaraju, M., Richard, P.N., Jagatheesan and Kumar, V. (2003). Dystocia due to

- Dicephalic monostomusmonster in a cross bred cow. *Indian J. Anim. Reprod.*, **24**(2): 175.
- El Sheikh, H., Hegab, A.O. and Zaabel, S.M. (2010). Dicephalic Atlodymus monster associated with hydrops Amnii in a buffalo cow: A case report. *Veterinary Research*, **3**(3): 46-48.
- Long, S. 2009. Abnormal development of conceptus and its consequences. In: *Veterinary Reproduction and Obstetrics*, Noakes. D.E., T.J. Parkinson and G.C.W. England (Eds.). Saunders Ltd. London.
- Monfared, A.L., Sahar, H.N. and Mohammad, T.S. (2013). Case Report of a Congenital Defect (Dicephalic) in a Lamb. *Global Veterinaria*. **10**(1): 90-92.
- Mukaratirwa, S. and Sayi, S.T. (2006). Partial facial duplication (diprosopus) in a goat kid. *J. South Afr. Vet. Assoc.*, **77**(1): 42-44.
- Pandey,A.K., Saini, G.S., Chander, S., Chaudhary, R.N., Jakar, P., Singh,M., Sunder,S. and Yadav,S. (2010). Dystocia due to abnormal calf in a buffalo: A case report. *Buffalo Bull.*, **29**(4): 315-317.
- Ramteke, S.S., Razzaque, W.A.A., Agivale, S.M. and Alai, R.V. (2023). A dicephalus tetrabrachius thoracophagustetrapusd caudatus conjoined monster calf in Marathawadi buffalo: A case report. *Buffalo Bull.*, **42**(1): 51-56.
- Robert, S.J. 1986. *Veterinary Obstetrics and Genital Diseases*. Indian reprints 1986, CBS Publishers and distributors. Delhi.
- Salami, O.S., Okaiyeto, S.O. Dan Birni, S. Ibe, C., Allam, L. and Kudi, A.C. (2011). A case of diprosopus Monauchenos in a day-old calf (White Fulani × Friesian cross) in an integrated dairy farm. *Inter. J. Livestock Prod.*, **2**(5): 55- 58.
- Shukla, S.P., Mudasir , Q. and Nema , S.P. (2011). Dystocia due to a conjoined twin monster fetus in a female buffalo. *Buffalo Bull.*, **30**(1): 12-13.
- Singh, B., Kumar, R. and Singh, N. (2020). Management of dystocia due to fetal ascites in a she-buffalo (*Bubalus Bubalis*): A case report. *Buffalo Bull.*, **39**(2): 265-268.
- Singh, L.K., Chaudhary, C.R., Singh, U. and Singh, P. (2022). Dicephalic fetal monster in a Murrah buffalo: A case report. *Buffalo Bull.*, **41**(3): 455-458.