



International Journal of Veterinary Sciences and Animal Husbandry



ISSN Online: 2456-2912
NAAS Rating (2026): 4.61
IJVSAH 2026; 11(9): 157-160
www.veterinarypaper.com
Received: 08-07-2026
Accepted: 30-08-2026
Published: 29-09-2026

The names and affiliations of all authors are provided below, following the references.

Partial fetotomy-assisted vaginal delivery of dicephalic derodymus thoracopagus monster fetus in a buffalo

Avaneesh Kumar Singh¹, Ashutosh Basera², Gaurav Tiwari³, Rahul Pandey⁴, Mahesh Kumar⁵, Vikas Sachan⁶

DOI: <https://www.doi.org/10.22271/veterinary.2026.v11.i9c.3804>

ABSTRACT

A four year old, primiparous Murrah buffalo was reported with an anamnesis of full-term gestation and having difficulty in parturition to the Teaching Veterinary Clinical Complex. At the time of presentation, two hind limbs and a tail were visible outside the vulva, indicating a posterior longitudinal presentation. Per-vaginal examination of the dam revealed three additional limbs within the uterine cavity, suggesting fetal monstrosity. Due to the abnormal fetal conformation, delivery could not be achieved through routine obstetrical manoeuvres. Therefore, partial fetotomy was performed as the method of choice. The procedure resulted in the successful vaginal delivery of a Dicephalic Derodymus Tetrabrachius *Tetrapus Dicaudatus Thoracopagus* female monster fetus. This case highlights the importance of timely diagnosis and appropriate obstetrical intervention in managing fetal monstrosities, causing dystocia in large animals.

Keywords: Buffalo, Dicephalic, Dystocia, Fetotomy, Monster, *Unicornis*

Introduction

Fetal monsters are also referred to as developmental abnormalities or congenital anomalies. Most fetal anomalies arise during the early stages of cell differentiation, when the developing conceptus is influenced by genetic and maternal factors. Mild developmental abnormalities of the ovum, embryo or fetus can result in structural defects, leading to congenital monstrosities (Purohit *et al.*, 2012) [1]. In bovines, fetal twin monstrosities account for approximately 2.2–10% of all fetal abnormalities (Ravikumar *et al.*, 2012) [2]. Among the various types of conjoined twin monstrosities reported, thoracopagus (twins are joined at the thorax) accounts for nearly 40% (Thangadurai *et al.*, 2015) [3]. It has been noticed that conjoined twins are monozygotic and develop from a single ovum (Bhoi, 2009) [4] and are of the same sex (Arthur *et al.*, 2001) [5]. Fetotomy is a good alternative for relieving the fetal monster that causes dystocia (Vermunt, 2009) [6]. This case report describes the successful per-vaginal delivery of conjoined female monster fetus in a primiparous buffalo following partial fetotomy.

Case history and observation

A four-year-old primiparous Murrah buffalo was reported to the Teaching Veterinary Clinical Complex, DUVASU, Mathura (U.P.) with an anamnesis of full-term gestation, rupture of the water bags eight hours ago, mild staining and difficulty in parturition since last night. The case was initially attempted at field level by a local practitioner but was unsuccessful. On visual examination, it was found that animal had loosening of sacro-sciatic ligaments and two hind limbs along with tail were hanging out through the vulva (Figure-1). Clinical examination revealed the animal had all vital parameters within the normal range, including good body condition. Gynaeco-clinical examination revealed a dried, dilated birth canal, dilated cervix and three more limbs were palpated in the deep uterine cavity without any reflexes. The fetus was diagnosed as a monster fetus and it was decided to deliver this fetus per-vaginally by fetotomy without opting for caesarean section.

Treatment and Discussion

The buffalo was restrained properly in lateral recumbency followed by low epidural anaesthesia (2% lignocaine hydrochloride @ 5 mL) administration to avoid pain and straining. Birth passage was lubricated with ample amount of liquid paraffin and intravenous administration of inj. Dexamethasone @ 40 mg as anti-shock and inj. Tranexamic acid @ 5 mg/kg body wt. as hemostat. After failure of obstetrical manoeuvre, percutaneous detruncation, at the level of lower abdomen, was done with double-barrelled Thygesen's fetotome.

Corresponding Author:
Avaneesh Kumar Singh
Department of Veterinary
Gynaecology and
Obstetrics, Faculty of vet-
erinary and Animal
Sciences, I.Ag.Sc., RGSC,
BHU, Mirzapur, Uttar
Pradesh, India

After detruncation space was formed, and three fore limbs were taken out at the vulval region and deviated head was felt in deep uterine area, but all the pelvic space was occupied by three forelimbs; then it was planned to cut one forelimb with the help of fetotome. After cutting the one forelimb as it creates space, deviated head was corrected and pulled out from vulva by fixing the William's long blunt hook in both inner canthus of eye orbit. Three point traction (two in both fore limbs with Moore's obstetrical chain and one deep throat region with hook) was applied which resulted in to successful per-vaginal delivery of the Dicephalic Derodymus Thoracopagus Tetrabrachius *Tetrapus* Dicaudatus dead monster (Figure-2) along with placenta. The monster fetus had two heads (Dicephalic), two necks (Derodymus), four forelimbs (Tetrabrachius), four hind limbs (*Tetrapus*), two separate tails (Dicaudatus) but jointed at thorax (Thoracopagus). Postoperatively, the animal was administered with inj. calcium borogluconate @ 450 mL, slow IV and inj. oxytocin @ 50 IU, IM. The animal was also treated intramuscularly with inj. ceftriaxone @ 10 mg/kg body wt., inj. flunixin meglumine @ 2.2 mg/kg body wt., inj. chlorpheniramine maleate @ 0.5 mg/kg body wt. and intrauterine therapy was done with 4 boli of oxytetracycline (each 500 mg) and nitrofurazone (60 mg) & urea (6 gm). Owner was advised to give oral herbal ecobolic syrup @ 200 mL/ day and follow this treatment for 5 days. Further, postpartum findings of the monster fetus revealed one pair of lungs with a single heart, two pairs of kidney and a pair of spleen, liver with gallbladder and out of two uteri, one was unicornuate and another was bicornuate (Figure-3). The dam recovered clinically during the reported follow-up period.

Dystocia is a common sequel of thoracopagus monstrosity (Kumar *et al.*, 2018) [7]. They are the result of incomplete division of a fertilized ovum and show great variation from partial duplication to almost complete separation of two individuals, joined in just a few places. Conjoined twin is resulted from incomplete subdivision of the embryonic axis that occurs at a relatively later phase of development (Kumar *et al.*, 2012) [8]. Previously reported, Thoracopagus conjoined twins were female (Singh *et al.*, 2025) [9] and male (Singh *et al.*, 2020) [10], indicating that conjoined twins usually possess the same sex, as observed in the present female fetus. *Dicephalus* Derodymus monsters (having 2 heads and 2 necks separately) have previously been reported in buffaloes (Dutt *et al.*, 2018; Singh *et al.*, 2018) [11, 12] and cows (Ravikumar *et al.*, 2022) [13], where the fetuses were delivered per vaginally by fetotomy, similar to the present case. Caesarean section is not required in all cases, fetotomy is the best alternative method for delivering such cases which avoid the postoperative complications of caesarean section, such as uterine adhesions, peritonitis (Kumar *et al.*, 2019) [14] and a low survival rate of 45.11% (Singh *et al.*, 2013) [15]. In this case fetotomy was performed to deliver this monster fetus. On thorough post-mortem examination, it was found that fetus was having single heart and liver with a pair of spleens, two pairs of kidneys, one pair of lungs and out of two uterus, one was bicornuate and the other was unicornuate. *Uterus unicornis* is a congenital anomaly that results from the developmental failure of paramesonephric/ Mullerian duct, reported in this case.



Figure 1. Both hind limbs with tail of female fetus extended through the birth canal of dam



Figure 2. Dicephalic Derodermus Thoracopagus fetus delivered by detruncation and amputation of one forelimb by fetotomy



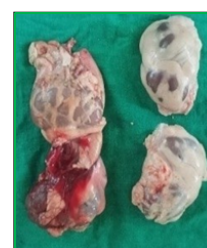
a)



b)



c)



d)



e)

Figure 3. Different organs found in PM of fetus: (a) One pair lungs with single heart, (b) Single liver with gall bladder, (c) one pair spleen, (d) two pair kidney, (e) two uterus (one unicornis and one bicornis)

Conclusion

Timely assessment of the thoracopagus monster fetus can be delivered with the help of fetotomy, which is less time-consuming and require less preparation as compare to cesarean section and chances of postoperative complications like uterine adhesion and peritonitis are least. The future fertility of the animal is good if safely performed. In present case, longer reproductive follow-up is required to assess subsequent fertility

Acknowledgement

Authors are highly grateful to the Head of the Department to provide necessary facilities to carry out the work.

Conflict of interest

There is no conflict of interest.

References

1. Purohit GN, Kumar P, Solanki K, Shekher C, Yadav SP. Perspectives of fetal dystocia in cattle and buffalo. *Vet. Sci. Dev.* 2012;2(8):31.
2. Ravikumar K, Selvaraju M, Manokaran S. Dystocia due to dicephalus tetrabrachius thoracopagus tetrapus dicaudatus monster in a Jersey crossbred cow. *Indian Vet. J.* 2012;89(08):96-97.
3. Thangadurai R, Selvaraju M. Dystocia due to double headed monster fetus in Murrah buffalo under field condition. *Indian Vet. J.* 2015;92(11):61-62.
4. Bhoi DB. Conjoined sternopagus twin monster: a cause of dystocia in Mehsani buffalo. *Vet World.* 2009;2(8):327.
5. Arthur GH, Noakes DE, Pearson H, Parkinson TJ. *Veterinary Reproduction and Obstetrics*. 8thEdn. London: W.B. Saunders Co.; 2001. p. 242.
6. Vermunt J. Fetotomy. In: Noakes DE, Parkinson TJ, England GCW, editors. *Veterinary Reproduction and Obstetrics*. 9th ed. Oxford: Saunders Elsevier; 2009. p. 326-43.
7. Kumar A, Yadav DK, Agrawal JK, Sachan V, Singh V, Saxena A. Dicephalic Thoracopagus Dibrachius Tetrapus Monster In Murrah Buffalo: A Case Report. *Haryana Vet.* 2018;57(2):241-242.
8. Kumar R, Krishnakumar K, Ezakial R, Chandrahasan C. Per vaginal delivery of a dicephalus dicaudatus xiphophagus monster. *Indian J Anim Reprod.* 2012;33:96-97.
9. Singh AK, Kumar M, Sachan V, Agrawal JK, Saxena A. Delivery of monocephalic thoraco-omphalopagus monster through fetotomy in Murrah buffalo. *Indian J. Anim. Hlth.* 2025;64(1):193-194.
10. Singh AK, Kumar M, Sachan V, Saxena A. Non-surgical management of dystocia due to sternopagus monster in Murrah buffalo. *Indian J. Anim. Hlth.* 2020;59(1):113-115.
11. Dutt R, Singh G, Gahalot SC, Patil SS, Kumar G, Chandolia RK. A rare case of dicephalus derodimus monster in a primiparous Murrah buffalo: A case report. *Theriogenology Insight.* 2018;8(2):49-52.
12. Singh G, Pandey AK, Jasmer G, Gunwant P, Lokesh K, Sarita. Per vaginal delivery of a derodimus dicephalus monster fetus in Murrah buffalo – A case report. *Buffalo Bulletin.* 2018;37(3):321-323.
13. Ravikumar K, Gawhane AS, Periyannan M, Selvaraju M, Napoleon ER, Palanisamy M, Cherian JM. Successful delivery of dicephalus derodimus dicaudatus monster in a Jersey crossbred cow by partial fetotomy. *The Pharma Innovation Journal.* 2022;11(SP-4):2084-2086.
14. Kumar S, Muddarangaiah MR, Ahuja AK, Kumar A. Per Vaginal Delivery of a Conjoined thoracopagus Female Twin Monster in Murrah Buffalo. *Indian Vet. J.* 2019;96(06):66-67.
15. Singh G, Pandey AK, Agnihotri D, Chander S, Chandolia RK, Dutt R. Survival and fertility rate in buffaloes following caesarean section and mutation with/without partial fetotomy. *Indian J Anim Sci.* 2013;83(3):251-253.

How to cite this article: Singh AK, Basera A, Tiwari G, Pandey R, Kumar M, Sachan V. Partial fetotomy-assisted vaginal delivery of dicephalic derodimus thoracopagus monster fetus in a buffalo. *International Journal of Veterinary Sciences and Animal Husbandry.* 2026;11(9):157-160. doi: <https://www.doi.org/10.2271/veterinary.2026.v11.i9c.3804>

Authors

Avaneesh Kumar Singh

Department of Veterinary Gynaecology and Obstetrics, Faculty of veterinary and Animal Sciences, I.Ag.Sc., RGSC, BHU, Mirzapur, Uttar Pradesh, India

Ashutosh Basera

Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science and Animal Husbandry, U.P. Pandit Deendayal Upadhyay PashuChikitsa Vigyan Vishwavidhyala Evam Go-Anusandhan Sansthan, Mathura, Uttar Pradesh, India

Gaurav Tiwari

Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science and Animal Husbandry, U.P. Pandit Deendayal Upadhyay PashuChikitsa Vigyan Vishwavidhyala Evam Go-Anusandhan Sansthan, Mathura, Uttar Pradesh, India

Rahul Pandey

Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science and Animal Husbandry, U.P. Pandit Deendayal Upadhyay PashuChikitsa Vigyan Vishwavidhyala Evam Go-Anusandhan Sansthan, Mathura, Uttar Pradesh, India

Mahesh Kumar

Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science and Animal Husbandry, U.P. Pandit Deendayal Upadhyay PashuChikitsa Vigyan Vishwavidhyala Evam Go-Anusandhan Sansthan, Mathura, Uttar Pradesh, India

Vikas Sachan

Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science and Animal Husbandry, U.P. Pandit Deendayal Upadhyay PashuChikitsa Vigyan Vishwavidhyala Evam Go-Anusandhan Sansthan, Mathura, Uttar Pradesh, India