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Mohan Gawai

Division of Animal
Reproduction, ICAR-Indian
Veterinary Research Institute,
Izatnagar, Bareilly, Uttar
Pradesh, India

Brijesh Kumar

Division of Animal
Reproduction, ICAR-Indian
Veterinary Research Institute,
Izatnagar, Bareilly, Uttar
Pradesh, India

Tarun Kumar Sahu

Division of Animal
Reproduction, ICAR-Indian
Veterinary Research Institute,
Izatnagar, Bareilly, Uttar
Pradesh, India

Amala Jackson

Division of Animal
Reproduction, ICAR-Indian
Veterinary Research Institute,
Izatnagar, Bareilly, Uttar
Pradesh, India

Chinmay Warghat

M.V.Sc. Scholar, Division of
Animal Reproduction, ICAR-
Indian Veterinary Research
Institute, Izatnagar, Bareilly,
Uttar Pradesh, India

Sanjeev Mehrotra

Division of Animal
Reproduction, ICAR-Indian
Veterinary Research Institute,
Izatnagar, Bareilly, Uttar
Pradesh, India

Corresponding Author:

Chinmay Warghat

M.V.Sc. Scholar, Division of
Animal Reproduction, ICAR-
Indian Veterinary Research
Institute, Izatnagar, Bareilly,
Uttar Pradesh, India

Fetotomic delivery of a ‘monocephalic thoracopagus tetrabrachius tetrapus dicaudatus’ monster in a Murrah buffalo

Mohan Gawai, Brijesh Kumar, Tarun Kumar Sahu, Amala Jackson, Chinmay Warghat and Sanjeev Mehrotra

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Abstract

A seven-year-old, pluriparous (3rd parity) Murrah buffalo with a history of full-term gestation and straining from the last 6 hrs. was reported to the ‘Referral Veterinary Polyclinic’ ICAR-Indian Veterinary Research Institute, Izatnagar. A Fetotomic delivery of monocephalic thoracopagus tetrabrachius tetrapus dicaudatus monster through percutaneous fetotomy in Murrah buffalo has been accomplished in this case report.

Keywords: Buffalo, conjoint twin monster, dystocia, fetotomy

Introduction

Dystocia is defined as the dam’s difficulty to deliver its fetus and requires human assistance. Any fetal problem, such as fetal monster, can cause deformation of body structure and causes dystocia in bovines (Kumar *et al.*, 2014) [3]. It occurs in roughly one out of every 100,000 births in cows (Arthur, 1956) [1]. Disruption of inner cell mass in the embryo results in partial duplication of body parts, leading to congenital fetal abnormalities. Replication of the anterior portion is more common than caudal and dystocia is the common sequelae of fetal monstrosities. In Murrah buffalo, incidence of monstrosities ranged from 7.9 to 12.8%. (Phogat *et al.*, 1992) [7]. The majority of the monstrosities are seen in water buffaloes, with little data available for swamp buffaloes (Kumar *et al.*, 2018) [2]. Fetotomy is a good alternative for relieving the fetal monster that causes dystocia (Vermunt, 2009) [10]. There are poor survival rates in buffaloes following delivery of calf by caesarean section compared to pervaginally delivery by fetotomy. A ‘monocephalic thoracopagus tetrabrachius tetrapus dicaudatus’ fetal monster was relieved by fetotomy in Murrah buffalo presented with dystocia in OPD of institute referral veterinary polyclinic.

Case History and Clinical Observations

A seven-year-old Murrah-graded buffalo in 3rd parity was presented to clinics with a history of straining and completed a normal gestation period. The animal was straining for the last 6 hours having an abnormal number of limbs in the vagina. The water bags had already ruptured as the case was manipulated by local quacks without success. The animal was dull, restless, and on sternal recumbency with a rectal temperature of 100.8°F. vulva was edematous and the Vaginal mucus membrane was congested and moist. Per vaginal examination revealed a fully dilated cervix with a dead fetus in posterior presentation with a lumbosacral position having four hind limbs, two forelimbs, and some intestinal loops presented on the vulva. Since the fetus was dead and it was a monster hence percutaneous fetotomy was performed.

Treatment and Discussion

The animal was restrained in lateral recumbency following low epidural anesthesia with 7 ml of inj. 2% of lignocaine hydrochloride. A preoperative dose of inj. dexamethasone (40mg intramuscular) was administered. following the lubrication of the birth canal sufficiently with liquid paraffin. The extended limbs of the monster were amputated by Thygeson’s fetotome.

Amputated limbs and the remaining fetus were extracted by applying disarticular hooks and obstetrical chains (Fig.1). BP knife was also used to achieve the sectioning of the fetus in a total of five pieces (Fig. 2). Following the procedure, six Nitrofurazone and urea bolus were administered intra-uterine to clean the uterine debris and prevent uterine infection. The animal was treated with an Antibiotic Ceftiofur sodium (@1.1mg/kg body weight I/M), Antihistaminic (inj. Chlorpheniramine maleate 0.5mg/kg body weight I/M) anti-inflammatory (inj. Flunixin meglumine @1.1mg/kg body weight I/M), and multivitamins (inj. Tribivet @10 ml I/M). calcium supplement (inj. Mifex @450 ml slow I/V) along with fluid therapy.



Fig 1: Amputation and traction of fetal limbs



Fig 2: Cut pieces of fetal monster at various region



Fig 3: Monocephalic Thoracopagus Tetrabrachius Tetrapus Dicaudatus fetal monster

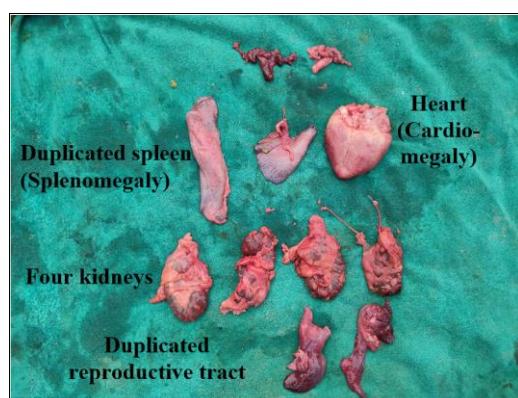


Fig 4: Postmortem Examination of monster

The gross examination of the monster revealed a female dead conjoined monocephalic twin fused at thoracic region (thoracopagus) with four forelimbs (Tetrabrachius), four hindlimbs (Tetrapus) and two pelvises (Dicaudatus) (Fig. 3). On dissecting the fetus four kidneys and duplicated spleen and the reproductive tract was recorded (Fig. 4). Dystocia due to conjoint twin had already reported in buffalo (Patil *et al.*, 2009; Prasad *et al.*, 2015) [6, 8] and in cow. The research suggests that caesarean sections have mostly been performed to treat such cases of dystocia (Monfared *et al.*, 2013) [5]. But, in this case, percutaneous fetotomy was done to relieve dystocia in buffaloes. The approach is safer and takes less time; it may be used effectively as an alternative to a caesarean operation.

Conclusion

This case report highlights a successful fetotomic delivery of a conjoined twin monster, specifically a monocephalic thoracopagus tetrabrachius tetrapus dicaudatus fetus, in a seven-year-old Murrah buffalo. The condition, characterized by severe fetal malformation, resulted in dystocia that was resolved through percutaneous fetotomy. The approach proved to be a practical and safer alternative to caesarean section, particularly when the fetus is non-viable. The procedure facilitated the effective removal of the fetus with minimal complications and may be preferred for managing similar cases in buffaloes, given its time efficiency and reduced post-operative risks. This case underscores the importance of timely intervention and appropriate clinical management in cases of fetal monstrosity-induced dystocia.

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Conflict Of Interest

No conflict of interest to declare.

References

1. Arthur GH. Conjoined twins-the veterinary aspect. *Vet Rec.* 1956;68:389-393.
2. Kumar P, Basir S, Singh M, Sharma A. Conjoined sternophagus twin monster: a cause of dystocia in Murrah graded buffalo. *Reprod.* 2018;13:69-70.
3. Kumar P, Sharma A, Singh M, Sood P, Barman P. Dystocia due to a dicephalus monster fetus in a buffalo. *Buffalo Bull.* 2014;33(1):13-15.
4. Lombard JE, Garry FB, Tomlinson SM, Garber LP. Impacts of dystocia on health and survival of dairy calves. *J Dairy Sci.* 2007;90(4):1751-1760.
5. Monfared AL, Navard SH, Sheibani MT. Case report of a congenital defect (Dicephalus) in a lamb. c2013.
6. Patil AD, Raghuwanshi DS, Kumbhar UB, Choudhari KS, Thorat MG. *Thoracopagus sternopagus* conjoined twin in a Marathwadi buffalo calf. *Vet Pract.* 2009;10(2):155-156.
7. Phogat JB, Bugalia NS, Gupta SL. Incidence and treatment of various forms of dystocia in buffaloes. c1992.
8. Prasad JK, Das GK, Krishnappa B, Kumar B, Ramteke S, Rakesh HB, *et al.* Monocephalic tetrabrachius tetrapus

- monster in a Murrah buffalo. *Indian J Anim Reprod*, 2015, 33(1).
9. Shukla SP, Mudasir Q, Nema SP. Dystocia due to a conjoined twin monster foetus in a female buffalo. *Buffalo Bull*. 2011;30(1):12-13.
 10. Vermunt J. Fetotomy. In: Noakes DE, Parkinson TJ, England GCW, editors. *Veterinary Reproduction and Obstetrics*. 9th ed. Oxford: Saunders Elsevier; c2009. p. 326-43.

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