

## CONJOINED DICEPHALIC THORACOPAGUS TETRABRACHIAS TETRAPUS DICAUDATUS MONSTER IN A BUFFALO

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### SUMMARY

A buffalo in its first parity was presented to the clinic with the history of efforts by a paravet to deliver the fetus but failed. Gestation period was 9 months 25 days. Both the water bags had ruptured 10 hours before. Caudal part of fetus was hanging outside of vagina along with fetal intestine. After a partial fetotomy and coordinated manual pulling, a conjoined dicephalus thoracopagus tetrabrachias tetrapus dicaudatus monster fetus was delivered. Buffalo recovered after follow-up treatment and advice.

**Keywords:** Buffalo, Fetotomy, Monster, Tetrabrachias, Thoracopagus

Dystocia is the common sequel of fetal monstrosities in bovines because of duplicated parts and increased number of limbs (Shukla *et al.*, 2007). Among all the fetal monstrosities, development of conjoined twins or diplopagus monsters is reported to be rare in bovines (Saini *et al.*, 2017). Conjoined twins are usually monozygotic in origin and occur due to incomplete division of one embryo into two at the primitive streak of the developmental stage (Noden and Lathunta, 1985). Interference during birth depends upon severity of the abnormality. Bhoi (2009) and Sunder *et al.* (2011) recorded conjoined sternopagus twin monster as a cause of dystocia in Mehsani and Murrah Buffalo, respectively. The present case reports a rare case of conjoined dicephalus thoracopagus tetrabrachias tetrapus dicaudatus monster fetus in a buffalo which was successfully managed by fetotomy.

A buffalo aged about 4 years in its first parity was presented to the Veterinary Clinical Complex, Mathura with the complaint of rupture of water bag 10 hours before and straining since. According to the owner, the gestation period was 9 months 25 days. Here one and half hour of rupture of first bag, a paravet tried to deliver the fetus but failed. Again in the morning, another local vet did effort to pull/deliver the fetus forcefully by applying traction on the extremities of the fetus in such a manner that abdomen of the fetus teared off and intestine was exposed outside the vulva of Dam. Appetite and water intake of the buffalo was normal. Loosening/relaxation of sacro-sciatic ligament occurred 2 days before. On physical examination, extremities and caudal part of fetus were hanging outside the birth canal.

On gynaeco-clinical examination, it was revealed that the presence of two heads and two another fetal limbs

inside the birth canal with no fetal reflexes. It was noticed that both hindlimbs and one forelimb of one fetus and one forelimb of other conjoined fetus were outside the vulva along with intestine (Fig. 1). It was difficult to insert the hand as the fetus was impacted in the vagina. Therefore, the case was diagnosed as dystocia due to monster fetus. After restraining the animal in right recumbency, low epidural anaesthesia (5 mL, 2% lignocaine hydrochloride) was given. As the case was of 10 hrs duration and due to previous excessive handling by local vet, liquid paraffin was infused inside the uterus to increase the lubrication. Proper lubrication made accessibility more comfortable. Further, it was decided to amputate the head and neck of one fetus by using Thygeson's fetotome. After removal of head and neck, coordinated forces was applied with the help of Moore's obstetrical chains and long handle blunt hooks. Then with the help of coordinated pulling, conjoined fetus was delivered. Delivered conjoined foetuses were having separate heads, necks and separate caudal part (tail and hind limbs).

Therefore, case was diagnosed dystocia due to conjoined dicephalus thoracopagus tetrabrachias tetrapus dicaudatus monster fetus (Fig. 2). One of the fetus from conjoined twins was affected with prognathism (lower jaw was longer than upper one) condition (Fig. 3). After delivery of monster fetus, placenta expelled out with a slight traction. Fluid therapy along with calcium borogluconate was administered intravenously. For follow-up treatment, antibiotic, NSAID, antihistaminic and vitamin B-complex intramuscularly were suggested for next five days. Intrauterine therapy was also advised for five days. Animal recovered after follow-up treatment and advice. Fetal anomalies and monstrosities are usually associated either with infectious diseases or congenital defects (Arthur *et al.*,

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Fig. 1. Both hindlimbs and one forelimb of one fetus and one forelimb of conjoined fetus outside of vagina



Fig.2. Conjoined dicephalus thoracopagustetra brachiastetrapus dicaudatus monster fetus

2001). Congenital defect present at birth signifies the abnormality of structure or function which may affect a single structure or function, part of system or its structure and function and/or an entire system (Patel *et al.*, 2016). In the present case, during relieving the dystocia, initially it was difficult to identify the type of monster. Therefore, it is important to know the nature of monstrosity and space in the birth canal so that we can further decide the strategy to deliver the fetus. Fetotomy offers a good alternative to caesarean hysterotomy if there is enough room in the pelvic



Fig. 3. One fetus affected with prognathism condition

canal to accommodate and correctly place the instruments (Noakes *et al.*, 2019).

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