CASE REPORT

Management of Dystocia due to Monocephalus Twin Monster in a Graded Murrah Heifer by Caesarean Section

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Monstrosity occurrences were associated with either infectious disease or congenital defects (Noakes *et al.,* 2009). In bovines, 5-10% of dystocia cases are due to fetal developmental abnormality, which includes fetal monsters, fetal ascitis and fetal maldispositions (Batra *et al.,* 2015) and 2.2 to 10% occurrence of all fetal anomalies in bovines are fetal twin monster (Ravikumar *et al.,* 2012). Different varieties of twin monsters were reported earlier, and thoracophagus contributed 40%, omphalogus 35%, pyopagus 18%, cephalogus 2%, and ischiopagus 2% (Thangadurai and Selvaraju, 2015). This report document a successful management of Dystocia due to monosepalous triotus tetradrachms thoracopagus tetrapus dicaudatus twin monster in a graded Murrah buffalo heifer.

Case History and Clinical Observation

A full term pregnant graded Murrah buffalo heifer on its first gestation was presented to Veterinary Clinical Complex of VCRI, Namakkal, TANUVAS with the history of Dystocia for the past 12 hours and it was attended by field veterinarian with futile attempt. On clinical examination, the animal was restless and it was in standing posture and all physiological parameters were within the normal range. On vaginal examination complete cervical dilatation was noticed and uterus was tightly contracted over the fetus. Further, six numbers of limbs, two pelvises and two tails were noticed. Hence, the case was diagnosed as a fetal monster.

Clinical Management and Discussion

The animal was restrained in the trevis and caudal epidural anaesthesia was induced with 5 ml of 2% lignocaine HCl and 20 litters of lukewarm water were infused into the uterus. Considering the fetal size with the dam's pelvis, it was decided to perform Caesarean section. The buffalo was placed in a hind quarter elevator on its left side and incision site was demarked by abdominal palpation of the fetus. Then inverted 'L' block was done with 2 % lignocaine HCl and normal saline at 1:1 ratio using 18 gauze hypodermic needle and surgical site prepared aseptically. The skin, abdominal muscles, and peritoneum were incised, and the omentum was pushed anterior to the uterus. The monster fetus was removed following uterine incision and uterus was sutured by cushing pattern with no.2 catgut and abdominal muscles were sutured with a continuous interlocking pattern; skin was sutured with cross mattress. Post-operatively animal was treated intravenously with Inj. Dextrose (1.5 litre), Inj. Ringer's lactate (2.5 liter), inj. Metronidazole (3500 mg), inj. Ceftriaxone (6 g) and inj. Flunixin meglumine (600 mg) and intramuscularly Chlorpheniramine maleate (140 mg) for the first three days. After that the animal was treated for three more days with antibiotics, anti-inflammatory, and antihistaminics. Skin suture was removed on day ten post-operatively, and the animal was discharged.

Twin foetuses were fully grown males and had symmetrical body parts. It had a single head and neck (Monocephalic) with three ears (Triotus). The twins were fused at the level of thoracic regions (Thoracopagus) and had four fore limbs (Tetrabrachius), four hind limbs (Tetrapus) and two tails (Dicaudatus). Based on the classification of fetal abnormalities by Roberts (1971), the monster delivered in the present case was Monocephalus Triotus Tetrabrachius Thoracopagus Tetrapus Dicaudatus twin monster (Fig. 1). Radiographical examination of monster revealed abnormal fetal limb

Fig. 1: Thoracopagus fetal monster

Fig. 2: Radiographic examination of the fetal monster

articulation in neck region (Fig. 2). Similar conjoined twins were reported by Selvaraju *et al.* (2002) in a buffalo, and Ravikumar *et al.* (2012) and Alagar *et al.* (2018) in cows. In the present case, the thoracic region's diameter was too large compared to a single fetus due to the fusion of the thoracic region. Hence the mutation operation and forced extraction could not be performed and hence a monster was delivered by Caesarean section.

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