



Assisted Per-Vaginal Delivery of Monocephalic Sternopagus Fetus in a Non-Descript Doe

Mahesh Kumar, Avaneesh Kumar Singh*, Vikas Sachan

Department of Veterinary Gynaecology and Obstetrics
DUVASU, Mathura- 281001 (U.P.)

ABSTRACT

The present communication is a report of assisted per-vaginal delivery of a rare conjoined twin male monster (Monocephalus Sternopagus Tetrabrachius Tetrapus Dicaudatus) fetus in a non-descript primiparous Doe.

Keywords: Doe, Dystocia, Monster, Monocephalus, Sternopagus

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INTRODUCTION

Any hamper in spontaneous birth of a fetus from the birth canal of full term dam may be of fetal or maternal origin termed as dystocia. It is the most common sequel of fetal monstrosities (Shukla et al., 2007) and it develops due to developmental anomalies involving various organs and systems of the individual. Conjoined or fused twins arise from incomplete division of a single embryo during the primitive streak stage (Balamurungan and Mohanapriya, 2020). Fetal anomalies and monstrosities of various types have been reported in large ruminants but are uncommon

in small ruminants (Kumar et al., 2018). The present report is of a case of monocephalus (one head), sternopagus (conjoint sternum), tetrapus (four rear limbs), Tetrabrachius (four forelimbs) and dipygus (duplication in the caudal region) conjoined twins in non-descript doe with multiple congenital malformations.

CASE HISTORY AND OBSERVATIONS

A non-descript full-term pregnant primiparous doe was presented with a history of restlessness, intermittently

*Corresponding author.

E-mail address: singh.avaneesh2005@gmail.com (Avaneesh Kumar Singh)

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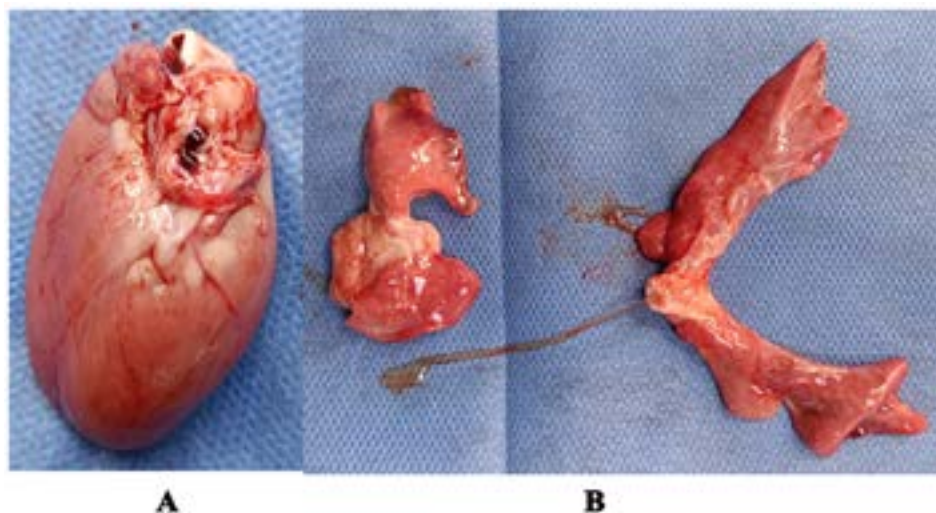
straining for the last 10-12 hours and the water bag was ruptured. As per the owner, the present case was handled by local paravet but attempts to deliver the fetus were futile. Clinical observations revealed all physiological parameters were within normal range with 102.3°F rectal temperature. The four rear limbs and two tails were hanging out from the vulva. Gynaecological examination revealed a fully dilated cervix, dried birth canal and the fetus was found in posterior longitudinal presentation, dorso-sacral position, body attached at sternum having multiple limbs inside the uterus. Two forelimbs were also engaged in the birth canal at the cervical level. Considering animal health status, cost-effectiveness and c-section complications, it was decided to deliver this monster fetus per-vaginally.

TREATMENT AND DISCUSSION

The animal was restrained in left lateral recumbency and primarily treated with intramuscularly anti-shock therapy inj. Dexamethasone @ 16 mg, total dose along with hemostat inj. Tranexamic acid @ 5 mg/ kg body weight. Fetal forelimbs were creating obstacles while extracting the rear limbs. With sufficient lubrication of the birth canal using liquid paraffin, forelimbs were flexed and pushed toward the uterus gently and forced traction was applied on four rear limbs and the fetus was delivered per-vaginally successfully. After expulsion of fetus, fetal membrane was removed manually. Gross anatomy revealed Sternopygus, monocephalus, Tetrabrachius, tetrapus and Dicatusaud (Fig. 1) having same sex (male) with separate vital organs (Fig. 2) except heart.



Fig. 1: Monocephalic Sternopygus monster



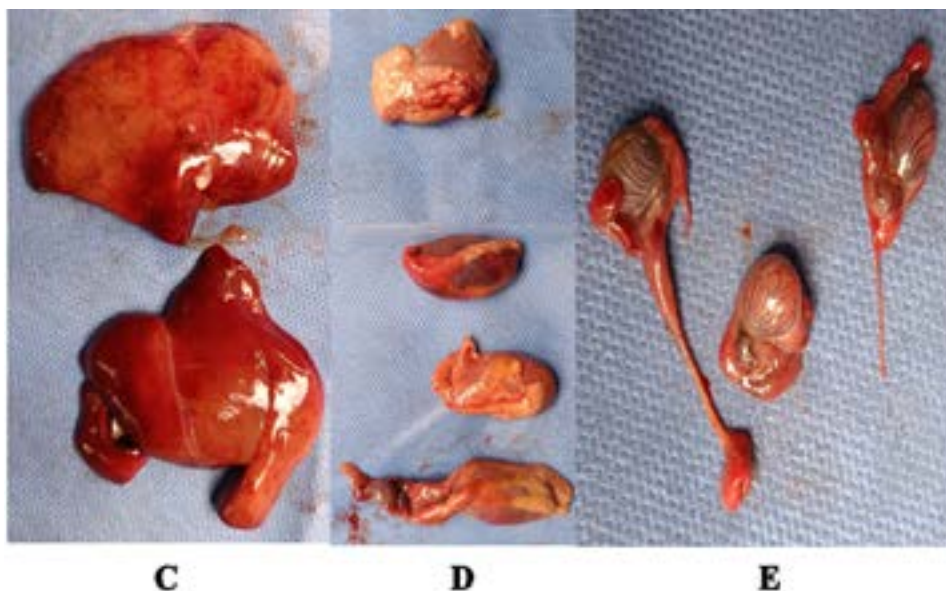


Fig. 2: Vital organs of monster: A -Single heart, B -Two pairs of lungs, C- one pair liver, D- two pairs kidney, E- Three testicles.

Subsequently, doe was administered intravenously by inj. Ceftriaxone @ 10 mg/body wt., inj. Flunixin meglumine @ 2.2 mg/body wt., inj. Tribivet @ 2 ml and inj. Normal saline (0.9%) @ 500 ml. Intrauterine therapy was done with Bolus Oxytetracycline @ 500 mg and Bolus Nitrofurazone (@ 60 mg) & Urea (@ 6 gm). The owner was advised to provide oral herbal ecboic syrup @ 20 ml/day and continues the same treatment for 5 days. Postmortem examination showed the presence of heart (single), lung (2 pairs), liver (1 pair), kidney (2 pairs) and testicles (three). Finally doe was recovered uneventfully without any complications.

Congenital anomalies are essentially unknown; however, the important known factors are prenatal viral infections, poisons ingested by the dam, vitamin deficiency like Vitamin A and folic acid, hyperthermia and gene mutation (Ali, 2011). Conjoined twins are always identical twins and of same sex (Singh *et al.*, 2020; Sachan *et al.*, 2016) as also found in the present case. Previously, Balamurungan and Mohanapriya (2020) in ewe and Jayaganthan *et al.* (2018) in doe delivered the monster fetus per-vaginally by correction and gentle traction, similarly in the present case report. Fetotomy and Caesarian section are other obstetrical operations that may be used to deliver a monster fetus but in small ruminants fetotomy has limitations and C-section is more costly, time consuming, require more assistance with more aftercare including longer recovery time (Gupta *et al.*, 2017). Hussain and Zaid (2010) stated that correction and traction of the fetus were the primary safe techniques to relieve dystocia.

CONCLUSION

This report concluded that a monster fetus in a doe can be delivered per-vaginally by assistance (correction and traction) without other obstetrical operations *i.e.* fetotomy or C-section if there is no oversizing of the fetus.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this case report.

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