



Dystocia due to Emphysematous Fetus co-twin with mummification in a Goat

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Abstract

A non-descript goat of 6 years age was presented to the Teaching Veterinary Clinical Complex, R.G.S.C, BHU with history of complete gestational length and continuous straining since last twenty-four hour. The per-vaginal examination revealed a dead fetus with bilateral shoulder flexion and downward deviation of head. The case was diagnosed as dystocia due to positional and postural defects. After epidural anaesthesia, the positional and postural defects were corrected and one dead emphysematous fetus was recovered. Upon further examination, one mummified fetus was observed *in utero* and was removed accordingly. The animal was administered necessary supportive therapy and recovered uneventfully.

Keywords

Mummification, Dystocia, Emphysematous fetus, Goat.

Introduction

The incidence of dystocia in goats is less common compared to cattle and buffaloes. It has been reported that the incidence of dystocia in goat is about 7% and the fetal causes responsible for the manifestation of dystocia are 44.44% (Anusha et al., 2016). There are various factors like nutritional status, breed, litter size etc. which directly or indirectly govern a successful kidding in goats. Any deviation of these factors beyond the holding point may predispose the animal for dystocia. Drost, (2007) enumerated some of these factors which play vital role during parturition and kidding and congenital abnormalities are one of the factors among them (Rautela et al., 2018). The congenital disorders include hereditarily defects as well as malformations suffered during pregnancy (Hemalatha et al., 2018 and Jena et al., 2016).

Fetal emphysematous condition most often causes dystocia in domestic animals. Foetal mummification is a condition where there is death of the fetus followed by resorption of fetal fluids and the uterus wraps around the fetus tightly giving an impression of 'mummy' (Roberts, 1971). Fetal mummification is more common in twin pregnancy and uncommon in singletons pregnancy of goat mostly due to compression of umbilical cord by another fetus (Noakes et al., 2009). The present case details about the treatment and management of dystocia due to emphysematous and mummified fetus in a goat and its successful recovery

Case History and Observation

A full term pregnant non-descript goat of 6 years age was presented at Teaching Veterinary Clinical Complex, Faculty of Veterinary & Animal Sciences, Banaras Hindu University with history of unproductive straining since last 24 hours. The doe was dull with 101.5°F rectal temperature, 120 bpm heart rate, 24/min respiration rate and pinkish moist mucous membrane (Fig 1A). Based on history, the doe was examined per vaginally after proper lubrication with liquid paraffin and it was observed that a dead emphysematous fetus was presented anteriorly with bilateral shoulder flexion and downwardly deviated head. Based on the history and clinical observations, the case was diagnosed as dystocia due to fetal cause.

Treatment and Discussion

The animal was first stabilised with fluid therapy and multivitamins. In the ensuing step, the animal was restrained properly on sternal recumbency and 2 ml of lignocaine HCL was injected epidurally. After trimming the hairs around the perineal region, liquid paraffin was used to lubricate the birth canal and manual operations were performed. After correcting the abnormal position and posture of the fetus, manual traction was applied and a dead emphysematous fetus was removed. Upon further examination of the reproductive tract, one mummified fetus was observed *in utero* and was removed accordingly (Fig 1A). After relieving the dystocia, the doe was administered antibiotics, uterine cleanser and other supportive therapy. The animal had an uneventful recovery.

Dystocia renders huge economic losses to farmers either due to death of new born or dam or adversely affecting dam fertility. Fetal emphysematous condition most often causes dystocia in domestic animals (Jena et al., 2017). In the present case, the positional and postural defects along with emphysematous condition caused dystocia. In twin pregnancy, due to obstructed blood flow from umbilical cord one fetus may undergo underdeveloped condition which leads to fetal mummification subsequently (Hemalatha et al., 2018).



Fig 1: Delivery of one emphysematous fetus co-twin with a mummified fetus in a non-descript goat of 6 years age. 1A: Dull, depressed doe with complete gestation period; 1B: Emphysematous fetus co-twin with a mummified fetus.

Conclusion

Dystocia is a life-threatening condition in domestic animals if not treated early. This condition often causes severe economic losses to the farmer owing to death of the fetus or dam or both. In goats, although dystocia condition is less common than cattle and buffaloes, twinning condition predisposes the animal to dystocia. In this case, an emphysematous fetus co-twin with fetal mummification might have resulted in to dystocia condition. Timely intervention is critical in dealing with cases of dystocia.

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Conflict of Interest

The authors declare no conflict of interest.

Ethical Approval

The study was conducted in accordance with the guidelines of Institutional Animal Ethical Committee (IAEC).

Data Availability Statement

The datasets generated during the current study are available from the corresponding author upon reasonable request.

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