



Fetal Mummification in Goat: A Case Report

Dipana Rudra Paul^{1*}, Divyanshu Lakhanpal¹, Anjali², Shishant swaroop peepar¹, Chandra Prakash Dixit¹ and Aadhithya Muthudwamy J¹

¹Division of Animal Reproduction, ICAR- Indian Veterinary Research Institute, Uttar Pradesh, India

²Division of Medicine, ICAR- Indian Veterinary Research Institute, Uttar Pradesh, India

*Corresponding Author: Dipana Rudra Paul, Division of Animal Reproduction, ICAR- Indian Veterinary Research Institute, Uttar Pradesh, India.

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Abstract

When fetal mortality in domestic animals happens in the middle or last third of gestation and does not lead to fetus abortion and involution of the corpus luteum, the fetus is mummified. The causes include a few genetic variables, an extended gestation period, and infectious diseases such leptospirosis, chlamydomphila, and toxoplasmosis.

In this study, a year-old nondescript doe with a history of straining and vaginal discharge over the previous 24 hours is brought to the Referral Veterinary Polyclinic, ICAR-IVRI, Bareilly, Uttar Pradesh. A deceased fetus and a fetus that had been manually mummified were relieved. NSAIDs, hydration treatment, and antibiotics were used to treat the doe.

Keywords: Cervix; Doe; Fetal Mummification

Introduction

Mummification of the fetus is a rare and intermittent condition that affects both single and twin pregnancies in small ruminants. The most common diseases linked to prenatal mummification include toxoplasmosis, Chlamydomphila, border disease, and Coxiella infection [1]. Small ruminants may potentially experience fetal mummification as a result of an energy and protein deficit [2]. The most prevalent type of mummification is called papyraceous, in which the fetus dies in the middle or last third of pregnancy, failing to abort, the corpus luteum persists, and the fetal fluids resume. In addition, the placenta of the mother has involuted and the fetal membranes have dried and shriveled. Some embryos undergo fetal mummification without damaging the others, allowing the pregnancy to continue to term [4]. Fetal mummification occurs more frequently in goats expecting twins or triplets, and poor nutrition is the main cause of fetal mummification [4]. This case

study demonstrates how a deceased fetus and effective fetal mummification were handled together.

Case history and observations

A year-old doe with a history of straining for the previous 24 hours and reddish vaginal discharge was brought to the Referral Veterinary Polyclinic, ICAR-IVRI, Bareilly, Uttar Pradesh. The history indicates that the doe lived out her whole period. The goat's udder was engorged, indicating that it had been given its full term.

With appropriate lubrication, a perovaginal examination revealed a completely dilated cervix and palpable fetal forelegs. More investigation showed that the fetus's neck was twisted laterally, toward the right side. A provisional diagnosis of dystocia due to fetal maldisposition was made based on a gynaecological examination.



Figure 1: A Mummified fetus and a dead fetus.

Treatment

The fetus had a right lateral deviation of the head, dorso sacral posture, and anterior longitudinal presentation. Once the fetal position was corrected using the obstetrical mutation approach, a dead fetus and another fetus that had been mummified were delivered using gentle traction (Figure 1).

Following that, the doe had injections of lactated Ringer's solution (100 ml) and dextrose, as well as intravenous injections of ceftriaxone and tazobactam (10 mg/kg body weight), meloxicam (0.3 mg/kg body weight), and intramuscular injections of oxytocin (1 ml). Additionally, intrauterine usage of the two uterine cleansing boluses containing urea and nitrofurazone was recommended, as well as the use of Involon, an oral uterine tonic. The doe healed without incident after receiving supportive treatments and antibiotics for five days.

Discussion

The case study's conclusions imply that the mummified fetus's retention must be caused by a different fetus and a persisting corpus luteum. Foetal mummification is the process by which a fetus dies and is preserved inside the uterus when normal parturition or abortion mechanisms fail [5]. Foetal mummification is rare in goats, but it appears to occur more frequently in twin pregnancies [6]. There was one mummified fetus delivered in the current case study. An instance of dystocia resulting from a dead, fully formed fetus and a smaller, mummified fetus was also reported by Ogbu, *et al.* [7]. The prognosis should always be cautious since a goat that has already had one mummified baby may have another at any point throughout the gestation cycle.

Conclusion

In order to diagnose fetal mummification early on, radiography or ultrasonography must be used. The identification of the infectious agent and the placental membrane serve as the foundation for the conclusive diagnosis of fetal mummification.

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