DOI: 10.48165/ijar.2023.44.01.17



ISSN 0970-2997 (Print)

The Indian Journal of Animal Reproduction

The official journal of the Indian Society for Study of Animal Reproduction

Year 2023, Volume-44, Issue-1 (June)



ISSN 2583-7583 (Online)

Twin Mummification in Non-Descript Doe: A Case Report

Jisna Kuttiyeri Sasidharan*, Shashikant Gupta, Pradeep, Pradeep Chandra, Brijesh Kumar, Subrata Kumar Ghosh

Division of Animal Reproduction, ICAR-Indian Veterinary Research Institute (IVRI), Izatnagar-243122, (U.P.), India

ABSTRACT

A doe in its second pregnancy, without any specific breed characteristics, was brought in with a complaint of thick brownish-red vaginal discharge. Upon conducting a thorough gynecological examination, a dead fetus was discovered lodged in the birth canal. By applying gentle traction using a small blunt eye hook and ensuring proper lubrication of the birth canal, two mummified fetuses were successfully delivered consecutively. The doe received appropriate treatment, resulting in a smooth recovery without any complications.

Key words: Doe, Mummified fetus, Haematic mummification.

How to cite: Sasidharan, J. K., Gupta, S., Pradeep, Chandra, P., Kumar, B., & Ghosh, S. K. (2023). Twin Mummification in Non-Descript Doe: A Case Report.

The Indian Journal of Animal Reproduction, 44(1), 77-79. 10.48165/ijar.2023.44.01.17

INTRODUCTION

Fetal mummification is considered to be rare in goats, but it seems to be more frequent in cases of twin pregnancies (Tutt, 1991; Hemalatha *et al.*, 2018). But the condition has been documented in cattle and bitch (Dadarwal *et al.*, 2006; Anusha *et al.*, 2014). It is associated with four main diseases: toxoplasmosis, Chlamydophila infection, border disease, and Coxiella infection (Edmondson *et al.*, 2012). The haematic type of mummification is commonly observed in ruminants, where the entire fetus is covered in a sticky, chocolate-brown substance. On the other hand, the papyraceous type involves the fetus shrinking and becoming dry like paper (Long, 2009). Mummification occurs when a fetus dies during the middle or last trimester of pregnancy. It is followed by a failure in abortion, the

persistence of the corpus luteum, absorption of fetal and placental fluids, and the placenta undergoing involution (Roberts, 1971). This article discusses a case where twin mummified fetuses were successfully delivered vaginally from a non-descript doe.

CASE HISTORY AND OBSERVATIONS

A three-year-old nondescript doe, on her second pregnancy, was brought to the Referral Veterinary Polyclinic, IVRI. The doe had a clinical history of thick brownish-red vaginal discharge for the past two days (Fig.1). The animal appeared active and had normal feed and water intake. Its rectal temperature was within the normal range (103.2°F),

E-mail address: jisnaks2012@gmail.com (Jisna Kuttiyeri Sasidharan)

Received 23.05.23; Accepted 25.07.23

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^{*}Corresponding author.

and the respiration rate was 20 breaths per minute. The animal displayed intermittent abdominal straining, and the perineum was soiled with vaginal discharge. Upon conducting a detailed gynecological examination, a single firm and immobile mass was detected in the birth canal, indicating the presence of a mummified fetus.

TREATMENT AND DISCUSSION

After adequately lubricating the birth canal, gentle traction was applied using a small blunt eye hook, resulting in the successful delivery of two mummified fetuses in succession (Fig.2). The fetuses were identified as male and female, with crown-rump lengths of 19 cm and 17 cm, respectively. Following the removal of the fetuses, a thorough examination of the birth canal was performed to ensure no other fetus was present. Radiographic examination confirmed the absence of any remaining intrauterine fetuses. The doe received treatment, which included the administration of the broad-spectrum antibiotic Enrofloxacin (Quintas* -Intas, India) at a dose of 5 mg/kg body weight (intramuscular injection), meloxicam (Melonex® - Intas, India) at a rate of 0.3 mg/kg body weight (intramuscular injection), and an intrauterine bolus (Cleanex® - Dosch, India) once daily for three days. Additionally, pheniramine maleate (Avilinvet® - MSD Animal Health, India) was administered at a rate of 1 mg/kg body weight (intramuscular injection) once daily for three days. The doe was also given a uterine cleanser (Uterotone® - Cattle Remedies, India) of 50 ml orally, twice daily for five days. After one hour of treatment, the animal was discharged, and the owner was instructed to continue the prescribed treatment for an additional four days. Follow-up observations indicated that the doe recovered without any complications.



Fig. 1. Mummified fetuses (female- left side, male- right side)

In this particular case, both mummified fetuses were found to be missing eye balls, indicating possible resorption. While a mummified fetus can sometimes be spontaneously aborted, it is often necessary for a veterinarian to assist in the expulsion (Lefebvre *et al.*, 2015). If the cervix is open, manual delivery with gentle traction can be employed. However, if the cervix is closed, a treatment approach combining a luteolytic agent (such as Cloprostenol), a cervical dilator (such as Valethamate bromide), and estrogen therapy may be necessary to achieve better results (Bisla *et al.*, 2018). Nevertheless, in this specific case, the mummified fetuses became stuck in the birth canal and were successfully extracted using gentle traction.

CONCLUSIONS

In conclusion, when dealing with mummification cases where the cervix is open, vaginal delivery using gentle traction can be performed. It is crucial to provide adequate antibiotic coverage during the removal of mummified fetuses to prevent the occurrence of further uterine infections.

ACKNOWLEDGEMENT

The authors are thankful to the Director, ICAR-Indian Veterinary Research Institute, Izatnagar; Incharge, RVP and Head, Division of Animal Reproduction for providing necessary facilities in the referral veterinary polyclinic for treatment of animals.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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