Short communication

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# Fetal Mummification in a Doe: A Case Report

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## *ABSTRACT*

Present case report describes resolving a case of fetal mummification in a doe with delivery of one mummified fetus after medical treatment and manual intervention.

***Key words:*** Doe, Fetus, Mummification, Epidosin

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## INTRODUCTION

Pregnancy failure can be classified into two stages based on the fetus's development and viability that is embryonic death and fetal death. One possible outcome of fetal death is mummification. Fetal mummification refers to the death of the fetus, which remains in the closed uterus with its fetal and body fluids resorbed. The corpus luteum is still active, and the dam does not return to the oestrus (Lefebvre, 2015). Different species, including the cow (Khasatiya, 2011), goat (Sasidharan *et al.,* 2023), dog (Anusha *et al.*, 2023), cat (Antoine *et al.,* 2002) have been found to infrequently exhibit fetal mummification. In most cases, the mummified fetus becomes dry and paper-like, called papyraceous mummification, while in cattle, hematic type of mummification occurs (Long, 2009). Fetal mummification associated with a persistent CL is observed mainly in cattle and goats.

## CASE HISTORY AND OBSERVATIONS

A non-descript doe was presented to RVP polyclinic with history of inappetence, straining, and thick, whitish vaginal discharges for 3 days and was bred by buck 2.5 to 3 month ago. Upon clinical observation, the rectal temperature was 101.8, conjunctival mucous membrane was congested, the animal was dull and depressed, Gynaecological examination revealed cervix was opened partialy and thick pus present, fetal parts felt via cervical opening but could not be delivered due to less space. Diagnosis of fetal mummification can be done by ultrasonographic examination which reveals presence of a compact, firm, and immobile mummified fetus without placental fluid or placentomes and absence of heartbeat, however in this case ultrasonographic examination was not done as because cervix was partially opened and fetal parts were palpable, hence induction therapy was given to dilate cervix and to induce abortion.

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## TREATMENT AND DISCUSSION

Initially doe was administered Injection Vetmate (Cloprostenol) 1ml im, Injection Epidosin (Valethamide Bromide) 2ml im, Injection Pregheat (Oetradiol Benzoate) 1ml im, Injection Dexona (Dexamethasone) 2ml im, and fluid therapy, DNS 300ml iv. We waited for 5 to 6 hours. After that, the cervix was dilated normally, and one mummified fetus was removed manually (Figure 1). Postoperative treatment includes administration of DNS 300 ml iv, injection of Enrofloxacin (Quinintas) at 5mg/kg body weight im for 5 days, injection of Meloxicam (Melonex) at 0.5mg/kg body weight im, suspension of Uterotone at 40ml/day orally once a day for 7 days, and intrauterine one Furea (Nitrofurazone 60mg, Urea 5000mg, Metronidazole 1000mg) bolus after the removal of all the debris from the uterus. Doe was discharged after 2 to 3 hours of the delivery and farmer was advised to follow prescribed treatment and to give palatable feed with ad-libitum quantity of fresh drinking water. The follow-up of the case assured the successful recovery of the dam.

**Fig. 1:** Mummified fetus attached with dried fetal membranes.

Fetal mummification in doe is one of obstetrical disease to cause economic losses to farmers. The present case study suggests that mummification of the fetus may be due to death of the fetus during the last of the second trimester or the start of the third trimester due to infectious cause because of an animal having thick puss like vaginal discharge, which is found to be associated with four major conditions: Toxoplasmosis, Chlamydophila, border disease, and Coxiella (ToxChBCox) infection (Edmonson *et al.,* 2012; Lefebvre, 2015). Females infected with ToxChBCox are normally asymptomatic, and the disorders occur infrequently. However, energy and protein shortages, particularly between days 90 and 120 of pregnancy, have also been linked. Lack of activation of the hypothalamic pituitary adrenal axis may potentially contribute to prolonged gestational length (Mahajan *et al.,* 2022).

## CONCLUSION

The present case reports the successful managements of fetal mummification in nondescript doe, in which one dead mummified fetus was delivered and doe recovered successfully and resulted positive outcome.

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## CONFLICT OF INTEREST

Authors don't have any conflict of interest.

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