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# Successful management of mummified foetus in a Sahiwal cow

# Y Nagendra Reddy and K Anusha

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#### Abstract

Management of Dry mummified foetus in a Sahiwal cow was reported. A Pluriparous Sahiwal cow was presented at VCC Tirupati for pregnancy diagnosis with unknown history of Insemination. So based on the Per Rectal Examination, a condition of cattle carrying a mummified foetus was diagnosed. After 72 hrs of Induction a Dry mummified mass was found in the cervix and it is lubricated and removed by applying simple traction.

Keywords: Mummification, Induction, per vaginal delivery, Haematic foetus

### Introduction

Foetal mummification is one of the gestational accidents in cattle that occur due to intrauterine death of the foetus between the third to eighth month of gestation and is occasionally reported in cows. In cattle foetal mummification has an incidence of less than 2% (Noakes *et al.*, 2019) <sup>[5]</sup>. A higher incidence of foetal mummification has been noticed in Guernsey and Jersey cattle, however, reports in crossbred cattle are very limited (Kumaresan *et al.*, 2013) <sup>[4]</sup>. This is characterized by failure in the expulsion of dead foetus, absorption of all foetal fluids, involution of foetal cotyledons and maternal caruncles, and presence of a hard, firm foetus in the uterine horn with no clinical signs. Persistent corpus luteum helps to maintain the dead foetus within the uterus by secreting progesterone even after the completion of the gestation period (Roberts 2012) <sup>[8]</sup>. The two notable forms of mummification in domestic animals include the haematic type in cattle and the papyraceous type in other domestic animals (Kumar *et al.*, 2017) <sup>[3]</sup>.

# **Case History, Clinical Examination and Treatment**

A pluriparous Sahiwal cow was presented to the Teaching Veterinary Clinical Complex, Tirupati with for a pregnancy diagnosis with unknown history of insemination. On per rectal examination, the uterus was tightly contracted over a hard bony mass with a lack of fremitus and foetal fluids. Per vaginal examination revealed a closed cervix. Based on per rectal observations the case was diagnosed as foetal mummification.

Therapeutic management involved the termination of pregnancy with a single dose of Inj. Cloprostenol sodium 500 mcg I/M and Inj. Dicrysticine-2.5g I/M for five days. Expulsion of chocolate-coloured fluids from the vagina was noticed 56 hours after injection. Per-vaginal examination at 72 hours revealed the presence of a bony mass in the vagina and was removed by simple traction. A typical haematic type of mummified foetus with foetal membranes wrapped around it along with chocolate-coloured fluids was recorded (Fig.1).

#### Discussion

The etiology of foetal mummification was multifactorial and are often difficult to identify. The common causes for bovine fetal mummification include genetic or chromosomal abnormalities, compression or torsion of the umbilical cord, placental defects, infectious agents like BVDV, leptospirosis, Neospora caninum, fungal infections, abnormal hormonal concentrations, and drugs (Roberts 1971, Noakes *et al.*, 2019)<sup>[7, 5]</sup>.

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#### Y Nagendra Reddy

Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science, Sri Venkateswara Veterinary University, Tirupati, Andhra Pradesh, India

#### K Anusha

Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science, Sri Venkateswara Veterinary University, Tirupati, Andhra Pradesh, India

Corresponding Author: Y Nagendra Reddy Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science, Sri Venkateswara Veterinary University, Tirupati, Andhra Pradesh, India Spontaneous abortion has rarely been seen in mummified cases, although no other systemic or other types of illnesses are seen in cows (Vikram *et al.*, 2020)<sup>[6]</sup>. The treatment of choice remains as induction of luteolysis by injection of PGF2  $\alpha$ , that follows the expulsion of the mummified foetus within 2 to 4 days (Jackson and Cooper, 1977 and Barth, 1986)<sup>[2, 1]</sup>. Kumaresan *et al.* (2013)<sup>[4]</sup> used a combination of oestradiol and Cloprostenol in cows for the expulsion of foetal mummy. However, in the present case, the use of Cloprostenol alone resulted in the termination of pregnancy and removal of mummified foetus with little assistance. Due to the long-time atony of the uterus and dry, firm and leathery foetus, the mummified fetus may not be expelled by the dam on its own and thus application of gradual traction is recommended for removal of mummified foetus (Roberts, 1971)<sup>[7]</sup>.



Fig 1: Mummified foetus with foetal membranes

# Conclusion

As foetal mummification is a sterile process with no systemic signs of illness and no spontaneous signs of abortion, it should be intervened as earlier as possible to improve the lifetime reproductive performance of animals.

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