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## Successful management of dystocia due to fetal mummification in a non-descriptive doe

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### Abstract

A primiparous non-descript doe was presented on lateral recumbency with history of sanguineous vaginal discharge and frequent bleating for last 18 hrs. The per-vaginal examination of the doe revealed birth canal entangled with fetal membrane and fetus following stabilization of doe, adequate lubrication of birth canal three mummified fetus were extracted out. The doe was treated with intravenous fluid, vitamins, anti-inflammatory and antibiotic for 3 consecutive days and recovered uneventfully.

**Keywords:** Mummification, primiparous, dystocia, doe

### Introduction

Fetal mummification is a rare obstetrical disorder in the doe which is result of fetal death in the middle or last third of gestation followed by failure of abortion, persistence of corpus luteum, absorption of fetal, placental fluids and involution of maternal placenta (Roberts, 1971) [1]. Incidence of fetal mummification more common in swine, dogs and cats carrying large litters which results in uterine overcrowding and placental insufficiency (Arthur, 2001) [2]. Four major infectious conditions which are associated with fetal mummification are Toxoplasmosis, *Chlamydophila*, border disease and *Coxiella burnetti* (Edmondson *et al.*, 2012) [3]. Other factors which causes fetal mummification may includes genetic anomalies (Roberts, 1962) [4], chromosomal abnormalities and abnormal hormonal profiles (Roberts, 1986) [5], compression and torsion of the umbilical cord (Mahajan and Sharma, 2002) [6], defective placentation (Irons, 1999) [7].

### Case history and clinical observation

A non-descriptive primiparous doe was presented to Large Animal Gynaecology and Obstetrics Unit of Madras Veterinary College Teaching Hospital, Chennai on lateral recumbency with history of 4 month of gestation, frequent bleating, and sanguineous vaginal discharge. Clinical examination revealed dehydrated, slightly pale and moist conjunctival mucus membrane; other parameters were within the physiological limit. Per-vaginal examination revealed partially dilated cervical canal entangled with fetal membrane and fetus without any uterine and abdominal contraction which indicates uterine inertia.

### Treatment and discussion

The doe was stabilized with intravenous fluids, vitamins, anti-inflammatory and antibiotic. The doe was restrained on standing posture, perineal area was washed with povidone iodine scrub solution, vaginal passage was thoroughly lubricated with liquid paraffin and cervical dilatation was stimulated by fanning and feathering with the help of index and middle finger for 10 minutes. After the optimum dilation of cervix with gentle traction three mummified fetus (Fig.1) along with entangled fetal membranes were delivered. The doe was treated with Inj. Dextrose normal saline 400 ml, Inj. Ringers lactate 400ml, Inj. Ceftriaxone @ 20 mg/kg body wt., Inj. Multivitamin @ 3ml, Inj. Meloxicam @ 0.5mg/kg body wt I/V and Inj. Pheniramine maletae 3ml I/M were continued for 3 consecutive days and doe had uneventful recovery.

In case of fetal mummification autolysis of fetus and fetal membranes occurs which leads to difficulties in the determination of causative agent. Though the exact causative and mechanism is not known, in this case study based on the case history and clinical observation the causative may be due to energy and protein deficiency during 90 to 120 days of gestation which leads to mummification (Braun *et al.*, 2007) [8] and failure of abdominal force, severe pain, age and

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debility may causes dystocia in fetal mummification. Antecedent reports of fetal mummification case studies described birth of normal live fetus along with mummified fetus (Chauhan *et al.*, 2014) <sup>[9]</sup> doe carrying triplet had two mummified fetus (Markandeya, 1991) <sup>[10]</sup>. However in the present case study all the three fetuses were mummified, lacked eye ball and glistening appearance of skin surface noticed (Fig.2).



**Fig 1:** Relieving mummified fetus along with fetal membrane



**Fig 2:** Triplet mummified fetus without eyeball and glistening skin surface

### Conclusion

Induction of cervical dilatation with velathamide bromide and prostaglandin analogue for expulsion of fetus in cow was reported (Srinivas *et al.*, 2007) <sup>[11]</sup>. Where as in the present case report manual stimulation of partially dilated cervix yields favorable outcome.

### References

1. Roberts SJ. Veterinary obstetrics and genital diseases. CBS Publishers and Distributors, New Delhi, India 1971,2<sup>nd</sup> Edn.
2. Arthur GH, Noakes DE, Parkinson TJ, England GCW. Veterinary Reproduction and Obstetrics, W.B. Saunders Company Ltd., London, England 2001,8th ed.
3. Edmondson MA, Roberts JF, Baird AN, Bychawski S, Pugh DG. Theriogenology of sheep and goats. In: Pugh

DG, Baird AN. editors. Sheep and Goat Medicine. 2nd ed. Maryland Heights (MO): Elsevier Saunders 2012;150-230.

4. Roberts SJ. The enigma of fetal mummification. J. Am. Vet. Med. Assoc 1962;140:691-698.
5. Roberts SJ. Disease and accidents of the gestation period. In: Veterinary Obstetric and Genital Diseases. 3rd ed. Newton Abbot, UK: David and Charles 1986,123-144.
6. Mahajan M, Sharma A. Haematic mummification due to umbilical cord torsion in a cow: a case report. Indian Vet. J 2002;79:1186-1187.
7. Irons PC. Hysterotomy by a colpotomy approach for treatment of foetal mummification in a cow. J. S. Afr. Vet. Assoc 1999;70:127-129.
8. Braun WF. Noninfectious prenatal pregnancy loss in the doe. In: Youngquist RS, Threlfall WR. editors. Current Therapy in Large Animal Theriogenology 2nd ed. Philadelphia: WB Saunders 2007,555-561.
9. Chauhan PM, Kapadiya PS, Sutaria TV, Nakhshi HC, Sharma VK. Retention of Mummified Fetus due to Uterine Inertia after Kidding in Doe. Vet. Clin. Sci 2014;2:64-66.
10. Markandeya NM, Pargonkar DR, Baksi SA, Doijode SV. Fetal mummification in goat- a case report. Indian Journal of Animal Reproduction 1991;12:107-108.
11. Srinivas M, Sreenu M, Laxmi Rani N. Per vaginal expulsion of mummified fetus in a crossbred cow. Indian Vet. J 2007;84:288.