

PER-VAGINAL DELIVERY OF MUMMIFIED FOETUSES IN A DOE: A CASE REPORT

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SUMMARY

A local non-descript doe (aged 4 years) was presented with a history of onset of straining since 12 hours. After attainment of complete cervical dilation, foetuses were relieved by gentle traction. The present case study reports successful per-vaginal delivery of two mummified foetuses in a doe without post-partum complications.

Key words: Per-vaginal delivery, foetal mummification, maceration, Valethamate bromide

Foetal mummification has been reported in cows (Patel *et al.*, 2012a), buffalo (Patel *et al.*, 2012b), goat (Smith, 1979) and ewe (Luedke, 1985). Subsequent absorption of the amniotic and allantoic fluid results in shrivelled parchment-like foetal membranes resulting in papyraceous mummification or in viscous chocolate coloured deposits on the foetal membranes in haematic mummification (Noakes *et al.*, 2009). Foetal mummification occurs when the foetus dies due to genetic defects, torsion or compression of the umbilical cord, placental defects or infections during the second or third trimester of gestation and substantial ossification has occurred but is retained in utero due to a high blood level of progesterone (Roberts, 1962).

A local non-descript doe (aged 4 years) was presented to Teaching Veterinary Clinical Complex, College of Veterinary Science, Rajendranagar with a history of onset of straining since 12 hours. Clinical examination revealed normal rectal temperature with increased respiratory and heart rates. Per-vaginal examination revealed partially opened cervix with tightly packed foetus in the birth canal.

Caudal epidural analgesia was induced with Inj. Lignocaine Hcl (5ml) between sacro-coccygeal space. For cervical dilatation, Inj. Valethamate bromide 20mg OD was given. Luke warm carboxy methyl cellulose (1%, 200ml) was infused into the vagina. After proper lubrication and attainment of complete cervical dilation, gentle traction was applied and dead mummified foetus was relieved (Fig.1) followed by another foetus of smaller size along with the detached placenta. The doe was administered with fluid therapy (Inj. 5% DNS 300ml,

I/V), antibiotic (Inj. Ceftriaxone 300mg, I/V) along with anti-inflammatory (Inj. Meloxicam 0.2-0.3mg per kg, I/M) and supportive therapy. The treatment was continued for three consecutive days.

Foetal mummification is rare in goats but dystocia appears to be more common in twin pregnancies than singletons (Tutt, 1991). In twin pregnancies, a mummified foetus could be a twin to a foetus that is carried to term. Markandeya *et al.* (1991) reported mummified foetus in triplets while Dhoble and Markandeya (1995) reported it in twin pregnancies in goats where the foetuses were of unequal size and dead which was in accordance to that of the present case report.

A fully developed dead foetus was palpated in the vaginal cavity which was in anterior longitudinal presentation and dorso-sacral position. The death of a foetus in the uterus without simultaneous luteolysis and cervical relaxation ensures foetal retention (Tadesse *et al.*, 2015) leading to mummification of the foetus while foetal maceration may be a sequelae of mummification and generally occurs in the event of death of foetus after formation of the foetal bones (beyond 100 days in small ruminants) such animals failed to abort, although the cervix is almost open (Purohit *et al.*, 2011). Embryonic death and maceration are probably caused by variety of micro-organisms found in the uterus (Mehta *et al.*, 2005). Bacteria can enter the uterus through the dilated cervix. The soft tissues are digested by combination of putrefaction and autolysis leaving a mass of foetal bones in uterus (Rautela *et al.*, 2016). The second foetus in the present case showed marked signs of putrefaction of soft tissues (Fig. 2) showing onset of tissue autolysis which would lead to foetal maceration. Failure of cervical

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Fig. 1. First foetus (mummified) relieved by gentle traction after attainment of complete cervical dilation.



Fig. 2. Second foetus showing marked signs of soft tissues autolysis.

dilation caused retention of the foetuses. Administration of valethamate bromide made it possible for successful per-vaginal delivery of mummified foetus without any further complications.

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