

MUMMIFIED FETUS CO-TWIN TO A LIVE KID IN A GOAT

H. HEMALATHA¹, K. MURUGAVEL^{2*}, S. KANTHARAJ³, D. ANTOINE⁴ AND M.S. RAJU⁵

Department of Veterinary Gynaecology and Obstetrics,
Rajiv Gandhi Institute of Veterinary Education and Research,
Puducherry - 605 009

Received: 30.09.2017

Accepted: 05.10.2017

ABSTRACT

A full-term pregnant two-year-old doe was presented with the history of delivery of a live kid 6 h earlier followed by mild straining without any progress. The vaginal examination revealed a fully dilated cervix with the presence of a fetal mass in the uterus. With mild traction per-vaginally, a mummified fetus was removed. The doe was administered fluid, analgesic and antibiotic parentally apart from intra-uterine pessaries and the doe has resumed normal health.

Keywords: Doe, Fetal mummification, Live fetus, Pervaginal delivery, Twinning

Fetal mummification is characterized by the death of conceptus followed by absorption of fetal fluids, persistence of corpus luteum, involution of uterus to an extent that it contracts tightly over the fetus and resembles to a contracted hard mass (Noakes *et al.*, 2009). The incidence of fetal mummification in the middle or last third of gestation is commonly observed in domestic animals but remains uncommon in sheep and goat (Roberts, 1986). In fact, fetal mummification is more common in twin pregnancies than singletons. In twin pregnancies, a mummified fetus could be a twin to a live fetus which is carried to term (Bhardwaj and Kumar, 2014). The present report describes a case of retained mummified fetus due to uterine inertia following normal birth of a live kid in a doe.

CASE HISTORY AND OBSERVATIONS

A full term pregnant non-descript doe was presented with the history of normal delivery of a live female kid 6 h earlier. Since then the doe was showing occasional mild straining without any progress. At presentation, the doe was dull, depressed and anorectic with 102.3°F rectal temperature. History revealed that

the doe gave birth to a normal twin in previous kidding. Based on history, the doe was examined per-vaginally and it was revealed that cervix was fully relaxed with a hard fetal structure palpable in the uterus. Based on clinical and gynecological examination, the condition was tentatively diagnosed as dystocia due to retained fetus on account of uterine inertia.

TREATMENT AND DISCUSSION

After lubricating the vaginal passage with liquid paraffin, a mummified fetus was removed from the uterus per-vaginally by applying mild traction. After manual removal of placental tissue, the doe was treated with intravenous administration of Inj. 5% Dextrose Normal Saline 250 ml, Inj. Oxytetracycline @ 10 mg/kg b wt and intramuscular injection of Meloxicam @ 0.4 mg/kg b wt. Also, Nitrofurazone and Urea bolus was inserted intrauterine. Antibiotic treatment was continued for 5 more days and the doe recovered uneventfully.

In the present case, the presence of a mummified fetus in the uterus has not affected the development and viability of the co-twin (Fig. 1). Further, dystocia due to *in utero* retention of mummified fetus in the present case may be attributed to uterine inertia (Chauhan *et*

¹PG Scholar, ²Associate Professor, ³Assistant Professor, ⁵Professor and Head; ⁴Professor and Head, Department of Teaching Veterinary Clinical Complex; *dr.murugavel@gmail.com



Figure 1: Mummified fetus co-twin to a live kid in a goat

al., 2014). In does and ewes, fetal mummification is uncommon, and affects both single and twin fetuses. Mummified fetus with normal live young one was reported previously in doe (Anil *et al.*, 2017) and ewe (Alagar *et al.*, 2017). As the plasma progesterone is maintained by the corpus luteum and fetal membranes of the live fetus, the cervix remains closed and the dead fetus gets mummified and delivered at the time of parturition. The fetal death is encountered generally due to several factors of genetic abnormalities involving autosomes or sex chromosomes, torsion, compression of the umbilical cord, placental defects, overcrowding of fetuses and infections during the second or third trimester of gestation after the formation of the placenta and substantial ossification of fetal bony remanence (Roberts, 1986).

ACKNOWLEDGEMENT

Authors are thankful to the Dean, Rajiv Gandhi Institute of Veterinary Education and Research, Pondicherry for providing necessary facilities for carrying out the present work.

REFERENCES

- Alagar, S., Prakash, S., Selvaraj, M., Ravikumar, K and Manokaran, S. (2017). Papyraceous mummification leading to dystocia of a normal fetus in a Mecheri ewe. *Indian J. Anim. Reprod.* **38**: 62-63.
- Anil, M., Rajashri, M., Raju, G. Solmon Raju, K.G. and Reddy, K.C. (2017). Fetal mummification in non-descript doe: A case report. *International J. Sci. Environ. Tech.* **6**: 2335-2338.
- Bhardwaj, R.K. and Kumar, S. (2014). Management of goat with one mummified and live fetus. *Indian Vet. J.* **91**: 64-65.
- Chauhan, P.M., Kapadiya, P.S., Sutaria, T.V., Nakhashi, H and Sharma, V.K. (2014). Retention of mummified fetus due to uterine inertia after kidding in doe. *Vet. Clinical Sci.* **2**: 64-66.
- Noakes, D.E., Parkinson, T.J. and England G.C.W. (2009). *Veterinary Reproduction and Obstetrics* 9th Edition. WB Saunders Company Ltd., London. pp: 139.
- Roberts, S.J. (1986) Diseases and accidents of gestation. In: *Veterinary Obstetrics and Genital Diseases*. 3rd Edition. Ithaca, New York. pp: 213-218.