PAPYRACEOUS MUMMIFICATION LEADING TO DYSTOCIA OF A NORMAL FETUS IN A MECHERI EWE

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ABSTRACT

Dystocia was diagnosed due to mummification of one of the twin fetuses in a Mecheri ewe. However, both the fetuses were delivered per-vaginally and the ewe recovered uneventfully.

Keywords: Ewe, Dystocia, Fetal mummification, Fetus

INTRODUCTION

During fetal mummification, the corpus luteum remains intact, cervix remains closed, the fetal fluids are resorbed and the fetus becomes dry and paper-like (Jackson, 2004). In small ruminants, this condition is associated with toxoplasmosis, *Chlamydophila*, border disease, and *Coxiella* infection (Edmondson *et al.*, 2012). The present report describes a case of dystocia due to fetal mummification in twin fetuses in a Mecheri ewe.

CASE HISTORY AND OBSERVATIONS

A full term pregnant Mecheri ewe (age ~3 year) was presented with the history of straining and rupture of water bags about 4h back but without any progress in the delivery of fetus. The vaginal examination revealed fully dilated cervix. A fully developed fetus was in vaginal cavity, in anterior longitudinal presentation and dorso-sacral position with bilateral shoulder flexion.

TREATMENT AND DISCUSSION

In the ewe, epidural anesthesia was achieved using 1 ml 2% lignocaine hydrochloride. A dead female fetus was delivered following sufficient lubrication of the birth canal using obstetrical gel and after correcting the bilateral shoulder flexion. Further

vaginal examination revealed the presence of another fetal mass inside uterus that was delivered through the vulva by simple traction. The examination of second fetal mass revealed parchment like appearance with brownish exudate and the eyeballs were absent (Figure 1). The fetal membranes were easily removed by manual traction and the ewe recovered without any post-operative complications. In an earlier case report, the fetal mummification was reported in a goat where a viable kid was born along with two mummified fetuses



Figure 1: Twin fetuses (Left, mummified; Right, fully developed) in a Mecheri ewe

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(Markandeya, 1991). Usually, fetal mummification occurs when the fetus dies due to genetic defects, torsion or compression of umbilical cord, placental defects or infections during second or third trimester of gestation, however, the fetus is retained *in utero* due to functional corpus luteum and circulating progesterone. The subsequent absorption of amniotic and allantoic fluids results in shriveled parchment-like fetal membranes resulting in papyraceous mummification or resulting in viscous chocolate coloured deposits on the fetal membranes in haematic mummification (Noakes *et al.*, 2009). The present case had parchment-like fetal membranes indicating papyraceous type of mummification.

REFERENCES

- Edmondson, M.A., Roberts, J.F., Baird, A.N., Bychawski, S. and Pugh, D.G. (2012). Theriogenology of sheep and goats. In: Pugh, D.G. and Baird, A.N., eds. *Sheep and Goat Medicine*. 2nd ed., Maryland Heights (MO): Elsevier Saunders, p 150-230.
- Jackson, P.G.G. (2004). Dystocia in the Ewe. In: Handbook of Veterinary Obstetrics. 2nd ed., Saunders, London, p 105-124.
- Markandeya, N.M. (1991). Fetal Mummification in a goat. *J. Anim. Reprod.*, **12**: 107-108.
- Noakes, D.E., Parkinson, T.J. and England, G.W. (2009). *Veterinary Reproduction and Obstetrics*. 9th ed., Elsevier Ltd. London. p 139-141, 209- 210, 367-368.