International Journal of Science, Environment and Technology, Vol. 6, No 4, 2017, 2335 – 2338

FETAL MUMMIFICATION IN NON-DESCRIPT DOE: A CASE REPORT

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Abstract: The present case study reports successful delivery of fully developed dead fetus and mummified fetus by gentle traction with uneventful recovery of doe without any complications.

Keywords: Dystocia, Mummification, Twin pregnancy, Cervical dilation, Gentle traction

Introduction

The incidence of foetal mummification is commonly observed in domestic animals occurring in the middle last third of gestation but it is uncommon in sheep and goat (Roberts 1971). The mummification was first reported by Loje (1930) in red Danish cattle due to single recessive autosomal gene as stated by Sane *et al.* (1994). The condition is said to be more common in swine, dogs and cats carry large litters which results in uterine overcrowding and placental insufficiency (Arthur, 2001). In does and ewes, fetal mummification is uncommon, and affects both single and twin fetuses. It is associated with four major conditions: toxoplasmosis, *Chlamydophila*, border disease, and *Coxiella* infection (Edmondson *et al.*, 2012). Braun *et al.* (2007) reported that Energy and protein deficiencies, particularly on day 90 to 120 of gestation also cause fetal mummification. The present communique is to place on record of a case of foetal mummification in a non-descript goat.

History and clinical examination:

A local non-descript doe aged 4 years was presented to TVCC, C.V.Sc, Rajendranagar with a history of labour more than 24 hours, decreased feed intake, intermittent straining, foul smelling sanguineous muco vaginal discharges. The doe was dull and depressed. The clinical examination revealed that the temperature was 103.2°F and the respiration -17 breaths per min and heart rate - 97 beats/min. Per-vaginal examination of the doe revealed partial opening of the cervix.

Received June 20, 2017 * Published Aug 2, 2017 * www.ijset.net

Diagnosis and treatment:

The perineal region of the doe was thoroughly scrubbed with 1% potassium permanganate solution. The doe was administered with Inj. Velathamide bromide @ 40mg I/V and waited for 30 min for dilatation of the cervix. The doe was secured in standing position and 1% carboxy methyl cellulose (CMC) was infused into the vagina using infusion set tubing. A well lubricated hand inserted into vagina, a dead fetus without any hair growth was removed by slight traction. On re-examination of the vagina found a firm immobile mass and the fetal mass was delivered by gentle traction. The fetus lacks eye balls and skin which might be due to resorption of skin and subcutaneous layers. Thus, the fetus was diagnosed as mummified fetus (Fig. No.1). After removal of the fetuses, the doe was treated with 5% DNS (500ml) I/V and antibiotic (Inj. Enrofloxacin 100mg, I/M) and anti-inflammatory (Inj. Meloxicam 4 mg, I/M) treatment continued for 5days and the doe recovered uneventfully.

Discussion

Tutt (1991) reported that the foetal mummification is rare in goat but appears to be more common in twin pregnancy which was in agreement with that of the present observation. Markendeya *et al.* (1991) and Doijode (1993) reported cases of mummification in goats where out of three foetuses, two were mummified and another one was completely developed and viable one. Ogbu *et al.* (2011) reported a case of dystocia due to mummification where both the foetuses were dead. In the present study, both fetuses were dead but only one foetus was mummified.

Fetal death in domestic animals occurring in middle or last third of gestation that does not result in luteolysis and abortion causes autolytic changes in the fetus, absorption of fetal fluids and mummification (Roberts, 2001). The present case study, one of the fetuses lacks eye balls and skin which might be due to resorption of skin and subcutaneous layers. Although spontaneous abortion of a mummified foetus can occur, expulsion of the foetus usually requires veterinarian intervention (Lefebvre et al., 2009). The main reason for non expulsion of mummified fetus in the present case was due to incomplete cervical dilatation. So, the doe was treated with Velathamide bromide for cervical dilation. Thus, the present paper reports successful management of fetal mummification in a non-descript doe without any complications.

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Fig. No. 1 showing successful traction and removal of mummified and fully developed dead fetus