

MANAGEMENT OF INCOMPLETE CERVICAL DILATATION COUPLED WITH PARTIAL FOETAL MACERATION IN A NON-DESCRIPT DOE

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Received: 13.06.2018; Accepted: 19.09.2018

SUMMARY

In the present communication, an unusual case of imperfect cervical dilatation coupled with partial fetal maceration in addition to live kids in a non-descript goat is reported.

Key words: Doe, Foetal maceration, Incomplete cervical dilatation

In farm animals, pregnancy loss can occur at any stage of gestation and it may be associated with expulsion of the dead fetus before term (abortion) or of a fully developed but dead fetus at term (still birth). Occasionally, failure of an aborted fetus to be expelled due to uterine inertia and intrauterine infections results in emphysema and maceration. In such situations, bacteria gain entry through the dilated cervix and by a combination of autolysis and putrefaction; soft tissues are digested leaving a mass of fetal bones within the uterus (Drost, 2007). These bones may be embedded within the uterine wall resulting in a chronic endometritis and severe damage to the endometrium (Noakes *et al.*, 2001). Fetal maceration may occur at any stage of gestation and has been observed in all species (Roberts, 1971). In goat, fetal maceration has been reported earlier by Mehta *et al.* (2005) and Ajitkumar *et al.* (2007). In the present communication, an unusual case of imperfect cervical dilatation coupled with partial fetal maceration in addition to live kids in a non-descript goat is reported.

A full term non-descriptive goat at second parity with continuous straining and muco-purulent vaginal discharge for 3 days was presented at Large Animal Obstetrics Unit, Madras Veterinary College Teaching Hospital. On general examination, temperature, pulse rate and respiratory rate were within normal range. Abdominal palpation revealed gross distension of uterus with fetal mass. Vaginal examination revealed incomplete dilatation of cervix with two finger dilatation. The ultrasonography was carried out and the fetuses were found viable and the case was diagnosed as maternal dystocia due to incomplete cervical dilatation.

As the cervix was soft on examination, the doe was treated with Inj. Oxytocin 15 IU in Inj. NSS 300 ml as slow intravenous drip. Per vaginal examination after 6 hours of treatment revealed a completely dilated cervix. The first fetus was in anterior longitudinal (P1), dorso-sacral (P2), with bilateral shoulder flexion (P3); Second in

posterior longitudinal (P1), dorso-sacral (P2), with bilateral hip flexion (P3) and third fetus was in anterior longitudinal (P1), dorso-sacral (P2), with bilateral shoulder flexion (P3) as examination one after another. Postural abnormalities were corrected and the fetuses were delivered by gentle traction. First and second fetuses were viable and normal. However, third foetus was partially macerated and the muscles of hind quarter were atrophied and all other visceral organs were exposed (Fig. 1). Following careful removal of the fetal parts, muscle remnants and bones of the third fetus, bolus Oxytetracycline (1 g) was powdered and mixed with 30 ml of normal saline and infused in to uterus. Treatment comprised of Inj. Oxytocin 5 IU, inj. Chlorpheniramine maleate 2 ml, and inj. Meloxicam 2 ml intramuscularly, and inj. Cefatoxime 300 mg and inj. 5% DNS 200 ml intravenously for three days. The doe had an uneventful recovery.

In the present case, two live kids were expelled along with a partially macerated fetus. A similar type of condition was also reported earlier in doe by Sontekke *et al.* (1999). Moreover, Mehta *et al.* (2005) also reported a case of fetal maceration in a doe where three fetuses were delivered normally and the fourth fetus was macerated. Further, they opined that the long time in the process of delivery of three fetuses might have resulted in fatigue of the uterine muscles and diminished strength of uterine contraction leading to infection gaining entry causing



Fig. 1. Macerated fetus (fetus 3) delivered along with two live kids (fetus 1 and 2).

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maceration. In the present case, the doe had been straining for past several days, however, she was unable to deliver because of imperfect cervical dilatation and this could have caused poor uterine contractions resulting in fetal maceration due to ascending uterine infection.

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