

Foetal Maceration in a Non-Descript Doe: A Case Report

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ABSTRACT

A one-year-old nondescript goat was presented to the Referral Veterinary Polyclinic (RVP-VGO) of the Indian Veterinary Research Institute, Izatnagar, with the chief complaint of foul-smelling discharge from external genitalia. The animal was reported to be pregnant for about 2-3 months. On examination, the cervix was observed soft and partially dilated with palpable foetal parts. Following obstetrical intervention, macerated fetuses were manually delivered via vagina. The present case report describes the successful resolution of a case of foetal maceration in doe through obstetrical intervention.

Keywords: Doe; foetal maceration; per-vaginum; obstetrical intervention

1. INTRODUCTION

Goat farming has been recognized to provide supplementary income to small- and medium-scale farmers and serves as an on-hand economic asset to the farmers. Goats play an integral role in the rural economy across plains, arid, semi-arid, and hilly regions in India (Khan et al., 2025). Fetal maceration refers to microbial digestion, putrefaction, and disintegration of a fetus within the uterus after fetal ossification has occurred (Kumar, 2009). Failure of an aborting fetus to be expelled and bacterial invasion of the fetus through a partially dilated cervix result in maceration (Noakes et al., 2009). Maceration can occur at any stage of pregnancy, though it often occurs during mid to late gestation (Roberts, 2004). This condition has been commonly reported in cattle and buffaloes (Purohit and Gaur, 2011), sheep (Ate et al., 2011), and mares (Burns and Card, 2000) but is

sporadic and rarely reported in goats (Rautela et al., 2016). The incidence rate of fetal maceration in goats has been reported to be around 0.2% (Zubair et al., 2022). The etiologic diagnosis of fetal maceration in ruminants is often difficult. The present report documents a case of mid-gestation abortion followed by fetal maceration with incomplete cervical dilation in a goat and its successful per-vaginal management.

2. CASE HISTORY AND OBSERVATIONS

A one-year-old primiparous, nondescript goat was presented to the Referral Veterinary Polyclinic (RVP-VGO), ICAR-IVRI Bareilly, with a history of anorexia, straining for the past 3 days, turbid vaginal discharge, and a pregnancy of about 2-3 months. On clinical examination, the doe was found to be dull and depressed with a soiled perineal region and foul-smelling vaginal discharge. The rectal temperature

was 103.5°F. On an abdominal ballot, the presence of a foetus could not be detected. A per-vaginal examination revealed a soft and partially dilated cervix, reddish-brown foul-smelling discharge, and a foetal head palpated near the cervical opening.

3. TREATMENT AND DISCUSSION

Intravenous fluid therapy with DNS and NS (10 mL/kg b.wt.) was administered to stabilize the dam. Injection of valethamate bromide (epidosin) 3 mL (10 mg/kg b.wt.), injection of dexamethasone 3 mL (12 mg TD), and PGF₂α (pregma) 1 mL (125 mg TD) were administered intramuscularly. Doe was allowed to rest for 45 minutes. Per-vaginal re-examination revealed full-hand dilation of the cervix. By manual traction with adequate lubrication, two autolyzed foetuses were extracted successfully (Fig. 1). Injection of ceftriaxone (15 mg/kg) and Tribivet (2 mL) was administered intravenously; injection of meloxicam (0.5 mg/kg b.wt.) and oxytocin 10 IU TD was administered intramuscularly, and two Furea (nitrofurazone, urea, and metronidazole) boluses were administered intrauterinely post-obstetric management. The farmer was advised to continue prescribed treatment along with suspension of exapar (Ayurvedic uterine cleanser) at 40 ml/day orally once a day for 7 days. The doe recovered uneventfully and was discharged after two hours of observation. The doe had an uneventful recovery. In most cases, embryonic or foetal death will result in resorption, abortion, maceration, or mummification (Givens and Marley, 2008). Foetal death after bone formation will result in abortion, mummification, or maceration. In certain cases, the aborted foetus fails to get expelled due to insufficient dilation of the cervix or insufficient uterine contraction

due to postural abnormalities of the dead foetus (Drost, 2007). Bacterial invasion into the uterus through the dilated cervix will cause putrefaction and autolysis by digestion of soft tissues (Jones et al., 1997; Long, 2009).



Figure 1. Fig.1. Macerated foetuses after per-vaginal extraction

4. CONCLUSION

The present report documents the successful management of foetal maceration in which two autolysed foetuses were extracted, resulting in an uneventful recovery of the dam. The decision to have a surgical intervention should be a final recourse when manual extraction fails. Proper obstetrical management and vaginal delivery outweigh the need for expensive surgical procedures and hasten recovery in animals.

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CONFLICT OF INTEREST:

The authors declare no competing interests.

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