

TRAUMATIC UTERINE RUPTURE LEADING TO FETAL MACERATION AND RECTAL TEAR IN A EWE

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Abstract: A ewe presented with ventral abdominal swelling, putrid vaginal discharge and palpable fetal bones protruding through the abdominal wall, leading to a diagnosis of fetal maceration. The condition was successfully managed by caesarean section.

Keywords: Maceration, Ewe, Road traffic accident, Rectal tear, C-section

INTRODUCTION

Fetal maceration is a condition that occurs when a fetus dies in utero after the formation of bones typically after 100 days of gestation in sheep and goats and is not expelled, leading to putrefaction and autolysis of fetal tissues and placenta, while bony remnants remain floating in the uterine horns (Noakes et al., 2009). Treatment options include manual removal of bony fragments per vaginally or caesarean section (Rautela et al., 2016). The present communication describes an instance of fetal maceration coupled with rectal tear in a sheep.

CASE HISTORY AND CLINICAL OBSERVATION

A 6-year-old pluriparous ewe at full term gestation was presented to the Obstetrical Section, Veterinary Clinical Complex, Veterinary College and Research Institute, Salem, with a history of protruding fetal bones from a ventral abdominal swelling accompanied by foul-smelling discharge. The owner reported that the animal had been involved in a road traffic accident approximately one month prior, following which progressive abdominal swelling was observed. On physical examination animal appeared dull, depressed, dehydrated and was straining continuously. General clinical examination revealed congested conjunctival mucous membrane, elevated temperature (39.9⁰C). The ewe was stabilized with Inj: dextrose normal saline 150 ml (i.v), Inj: dexamethasone (0.2 mg/kg b.wt, i.m), Inj: ampicillin & cloxacillin (15 mg/kg b.wt, i.v). After stabilization the perineum was cleaned with 0.1% potassium permanganate solution. Per-vaginal examination revealed a tightly closed cervix. Based on the

history of trauma, clinical signs and physical findings the case was diagnosed as fetal maceration secondary to traumatic uterine rupture.

TREATMENT AND DISCUSSION

The surgical site was prepared aseptically. Local analgesia was induced using 2% lignocaine (8 ml) via an inverted L-block technique. A skin incision was made, and the uterus was accessed; macerated fetal bones were carefully exteriorized and removed. Intraoperative examination revealed complete adhesion of the uterus to the abdominal musculature, with no adhesions involving other intra-abdominal organs. The uterine cavity was lavage thoroughly with normal saline and metronidazole solution. The uterus was meticulously separated from the abdominal wall and closed in layers. Additionally, a small tear in the rectal portion of the intestine was identified and repaired using simple interrupted sutures of PGA 2-0. The abdominal musculature and skin were closed following standard surgical protocols. Postoperatively, the animal administered with ceftriaxone (15 mg/kg, IV), chlorpheniramine maleate (0.2 mg/kg, IM), and meloxicam (0.2 mg/kg, IM) once daily for four days. The ewe recovered uneventfully with no postoperative complication.

Fetal maceration was recorded in all domestic animals. It develops as sequelae to abortion or mummification due to incompletely dilated cervix. Fetal bones were fairly well developed after 3 months of gestation, particularly in small ruminants. Purohit and Gaur (2011) opined that maceration of the fetus occurs after fetal emphysema following fetal death, because of failure of dilation of cervix the fetal might retained in the uterine horn. In rare instances, fetal death might be associated with uterine torsion (Roberts, 2004), road traffic accident, fight with herd mates (Chakraborty et al., 2018) and iatrogenic uterine perforation (Bashiru et al., 2020), in the present case there was a history of accident might be suggestive of hysterocele and uterine perforation responsible for occurrence of fetal death followed by maceration in this case as opined by Mehta et al. (2005). The present case aligns with the report by Bashiru et al. (2020) and documents fetal maceration in an ewe resulting from iatrogenic uterine perforation.

		
Figure 1: Protruding fetal bones from a ventral abdominal swelling in ewe	Figure 2: Macerated Fetal bones	Figure 3: Adhesion of uterine horn

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