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## Successful Management of Macerated Fetus in A Marathwadi Buffalo

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#### ABSTRACT

A ten-month pregnant, six year old Marathwadi buffalo in her third party was presented with the history of anorexia, straining and foul smelling reddish discharge from vulva for 2 days. Per-rectal exam revealed a contracted uterus positioned at the pelvic brim, with a thickened uterine wall and bony prominences of a hard fetal mass felt. The placentomes were not palpable, and fremitus was absent. Per-vaginal examination revealed a completely dilated cervix. Therapeutically Managemental strategies for the treatment of macerated fetus typically includes manual removal of the macerated bony fetal parts along with uterine flushing/douching and prompt treatment with fourth generation antibiotics, uterine oral ecoolics and gluconeogenic precursors helps in achieving uneventful recovery within three days in Marathwadi Buffalo. *Keywords*: Autolysis, Fetal maceration, Marathwadi buffalo, Uterine lavage.

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#### INTRODUCTION

Maceration is the process in which a fetus dies after ossification in the uterus and then undergoes microbial decomposition or putrefaction in the amniotic fluid, eventually leaving only a mass of bones (Nithyashree *et al.*, 2023). Fetal maceration is a pregnancy complication where fetal death occurs, typically more often during mid to late gestation; however it can happen at any stage. Fetal maceration is a common sequel of mummification (Prabaharan *et al.*, 2022). The pathogenesis of fetal maceration is primarily associated with uterine infection, where bacterial agents such as Escherichia coli. After the fetal death, enter the uterus through the open cervix. Through a process of putrefaction and autolysis, the soft tissues are broken down, leaving only a mass of fetal bones in the uterus (Dutt *et al.*, 2018, Chaudhary *et al.*, 2022). The present report described the successful management of fetal maceration in Marathwadi buffalo.

# CASE HISTORY AND OBSERVATIONS

The six year old Marathwadi buffalo in its third parity with the history of ten month gestation period, was presented with the history of anorexia since two days; and foul smelling brownish vulvar discharge (Fig.1) and straining since a

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day. The animal was alert and active, showing no signs of severe distress or shock. Clinical parameters viz. temperature, heart rate and other vital signs were within normal limits. Per-rectal examination revealed, the contracted uterus and positioned at the pelvic brim, uterine wall was thickened; hard bony prominences of fetal mass were palpated. The placentomes were not palpable, and also the absence of fremitus. Per-vaginal examination revealed that the cervix was completely dilated, and bony parts palpated and removed per-vaginally (Fig. 2). As per the clinical findings the case was diagnosed as fetal maceration.



Fig 1. Brownish Discharge from vulva during Per-Vaginal Examination

#### Fig 2. Macerated fetal bones removed by per-vaginum

#### TREATMENT AND DISCUSSION

Buffalo was administered with antibiotics (Cefquinome @1mg/kg, I/M), NSAID (Flunixine meglumine @1.1mg/ kg, IM), Anti-histaminics (Chlorphenaramine maleate @ 0.2 mg/kg, I/M), electrolyte fluids Inj. Ringers lactate (2liter/day, I/V), Inj. 5% Dextrose (3 liter/day, I/V), Inj. Intalyte (2 L/day, I/V), calcium magnesium boro-gluconate (1ml/kg slow I/V), B-complex with liver extract (Inj. Belamyl @ 10ml, I/M). After the complete therapeutical treatment uterine flushing/douching by 1liter Inj. NS + Lugol's Iodine (Mild 2% Solution) I/U for 3 days. The supportive therapy (@E-booster 200 ml twice a day and Minfa gold powder @ 50gm daily P/O) was advised for the next three days along with same Antibiotic. Per-vaginal examination revealed that the cervix was fully dilated so, the protruding mass of fetal bones was removed per-vaginal approach using gentle traction. The uterus was subsequently lavage with 3 litres of lukewarm normal saline, just after the removal of macerated foetus. The buffalo showed uneventful recovery after three days. In the present case rectal examination revealed compact mass of fetal bones palpable in the uterine horn which was doughy and thick. The buffalo returned to estrus 60 days after treatment. Rectal examination, the uterine horn was found to be tonic, a follicle was present on the ovary, and the genital examination showed normal findings. Fetal maceration is a complication of pregnancy where fetal death is more likely to occur during the second half of gestation (Kumar et al., 2020). Fetal autolysis and invasion happen when pathogenic microorganisms migrate into the uterus through the cervix. The delayed cases of fetal maceration causes severe damage to the endometrium, became adhered to the uterine wall, (Ciplak *et al.*, 2023, Sood *et al.*, and this bacterial infiltration leads to fetal maceration.

## CONCLUSION

The buffalo has likely experienced fetal death at an advanced gestational age, leading to the maceration of the foetus inside the uterus. This condition may require veterinarian intervention to manage the infection, remove the macerated foetus, and ensure the post treatment fertility of the buffalo.

#### **CONFLICT OF INTEREST**

Authors have no conflicts of interest.

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