Case Report

FETAL MACERATION IN A KANNI BITCH

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ABSTRACT

A pluriparous Kanni bitch which was presented with the history of brownish vaginal discharge. Detailed gynaecological examination revealed presence of macerated fetal bones in the birth canal. Further, ultrasonographic examination revealed fetal bones in the uterus. Treatment with dextrose and oxytocin successfully expelled the macerated fetus. Animal had an uneventful recovery with antibiotic coverage.

Key words: Canine, Fetus, Maceration, Bones

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INTRODUCTION

Fetal maceration occurs as a consequence of the failure of aborting fetus to be expelled completely (Johnston *et al.*, 2001), which is further complicated by entry of pathogen into uterus through the completely or partially dilated cervix. This results in putrefaction and autolysis of muscles and soft tissues leaving only the fetal bones in the uterus (Long, 2009). Fetal maceration is commonly encountered in cattle, but the incidence is rare in dogs probably due to all fetal death generally results in expulsion of fetus (Johnston *et al*., 2001). Kanni is a rare indigenous hound breed of dog found in the southern districts of Tamil Nadu. The present report explains the diagnosis and successful management of fetal maceration in a Kanni bitch.

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CASE HISTORY AND OBSERVATIONS

A four years old pluriparous Kanni bitch weighing about 21 kg was presented to Veterinary Clinical Complex, Veterinary College and Research Institute, Orathanadu with the history of brownish vaginal discharge for a period of past 24 hours. The animal was mated 53 days back. Animal was maintained in confinement area.

About six puppies were delivered normally in the previous whelping. The bitch was satisfactory in feeding habit. Defecation and urination were voided normally. Clinical examination revealed 101.6°F rectal temperature and normal pulsation. External genitalia examination revealed edematous vulva and congested hyperemic vaginal mucous membrane. The mammary gland was enlarged (Fig.1.) and white watery milk secretion was observed. On abdominal palpation of the bitch, no fetal mass could be detected. Per vaginal digital examination

revealed fetal bone like structures in the vagina, dilated cervix and odourless dark brownish discharge. Sonographic examination revealed hyperechogenic areas consistent with fetal bones in the uterus (Fig.2.).

TREATMENT AND DISCUSSION

The fetal bones from the vaginal region were carefully removed. Then, the bitch was intravenously administered with 25% dextrose 300 ml, oxytocin 5 I.U. and broad spectrum antibiotic ceftriaxone @ 25 mg/Kg body weight. Immediately after therapeutic treatment, apartially macerated fetal mass with bony parts was expelled out from the birth canal (Fig.3.).Only the antibiotic therapy was followed for five consecutive days. After completion of therapy, the bitch had an uneventfull recovery.

In mammals, fetal maceration follows abortion in the late stage of gestation. Fetal maceration occurs when the cervix is either insufficiently dilated or abnormal presentation, position and/or posture of the dead fetus resulting in incomplete expulsion of the fetus (Konwar *et al.,* 2020). In the present case, incompletely macerated fetus in the uterus along with fully macerated fetal bones in the vaginal passage were observed with fully dilated cervix and odorless dark brownish discharge. Generally, the effective therapy for fetal maceration cases involves removal of macerated fetuses by ovariohysterectomy or hysterotomy. Medicinal therapy may be successful in fresh cases where fetal bony material is not embedded within the uterine musculatures (Feldman and Nelson, 1996). Since the present case is fresh with fully dilated cervix, therapeutic treatment results

Fig.1. Kanni bitch with enlarged mammary gland

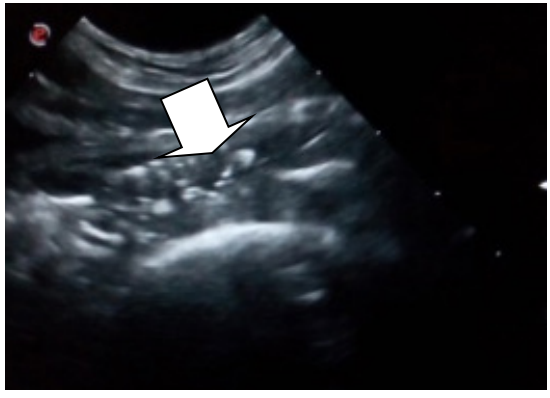

Fig.2. Sonographic examination revealed hyperechogenic areas consistent with fetal bones in the uterus

in expulsion of the retained macerated fetus. Fetal death in the present case might be due to a single pup syndrome (Pitroda *et al.*, 2019). The use of ultrasonography in dogs is very important for diagnosing early pregnancy, the determination of the viability of the fetus, the interpretation of the physiology or pathology of the genital organs, the prediction of the age of the fetus, the time of delivery and the

Fig.3. Macerated fetal bones

imaging of postpartum uterus (Erdogan *et al.,* 2019). The present study suggests that regular ultrasonographic examinations of pregnant dogs are necessary for early diagnosis of pregnancy complications.

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