

*Case Report*

**FETAL MACERATION IN GOAT: A CASE REPORT**

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**Abstract:** A 3.5 years aged goat of non - descript breed in her fourth parity was presented to Veterinary Gynaecology and Obstetrics polyclinic of the Indian Veterinary Research Institute, Izatnagar with the complaint of blood mixed discharge from external genitalia since morning. The goat was hit by a male goat on the previous night. As per the history, animal had completed four months of gestation. There was foul smelling reddish grey in color discharge coming out from the external genitalia. On examination, cervix was observed opened and fully dilated. Following treatment fetal bones were successfully removed manually per-vaginum after proper lubrication. The goat was physiologically recovered uneventfully post - treatment.

**Keywords:** Maceration, Goat, Fetus, Management.

**Introduction**

Fetal maceration is the disintegration of a fetus that can occur at any stage of gestation. Maceration has been observed in almost all the species however; it is rare in case of the goats. Maceration is common sequelae of mummification and generally occurs in the event of death of fetus after formation of the fetal bones (beyond 100 days in small ruminants) such animals failed to abort, although the cervix is almost open (Purohit *et al.*, 2011). Embryonic death and maceration are probably caused by variety of micro - organisms found in the uterus (Mehta *et al.*, 2005) Bacteria can enter the uterus through the dilated cervix. The soft tissues are digested by combination of putrefaction and autolysis leaving a mass of fetal bones in uterus. In the present report, a case of fetal maceration and its successful management in the goat has been reported.

**Material and Method**

**History**

A 3.5 years aged goat of non - descript breed was presented to the Veterinary Gynaecology and Obstetrics section of the Referral Veterinary Polyclinic of the Indian Veterinary Research Institute, Izatnagar with the complaint of blood mixed discharge from the external genitalia

since morning. There was a history of the hit by the male goat on previous night. The said goat was in her fourth parity and completed about 4 months of the gestation.

### **Clinical examination**

The goat was observed alert and active. Rectal temperature was recorded 103.6° F. The animal was restrained in internal recumbency and detailed gynecological examination was performed. A reddish grey foul smelling discharge was noticed from the external genitalia (Fig. 1). On per- vaginal examination, cervix was found open and fully dilated. Fetal bones were felt inside the uterus indicating fetal maceration.



**Fig.1.** Reddish gray discharge from vagina

### **Therapeutic and obstetrical management**

The goat was properly restrained in the lateral recumbency. The bones were removed manually per- vaginam after proper lubrication (Fig. 2). The pieces of bones were removed one by one (Fig. 3). After ensuring that no large pieces of bones could be present, 10 ml metronidazole (Metrogyl® Unique Pharmaceuticals Ltd, Mumbai, India) was infused intrauterine by sterilized AI sheath. 1 ml Dexamethasone (Dexona® Zydus AHL, Ahmadabad, India) intramuscularly and 3 ml Revici® (Knoll Pharmaceuticals Ltd, Mumbai, India) intramuscularly were also administered. The holistic therapeutic approach includes 1.5 ml Enrofloxacin (Enrocin® Vetnex Animal Health Ltd, New Delhi, India) and 3ml Meloxicam (Melonex® Intas Pharmaceuticals Ltd, Ahmadabad, India) intramuscularly daily for 3 consecutive days. The owner was advised to offer 40 ml uterine cleanser (Uterotone liquid® Cattle Remedies India Ltd, Gurgaon, India) orally atleast for 10 days. On subsequent follow up, the goat was physiologically recovered uneventfully post – treatment.



**Fig.2** Manual removal of fetal parts and bones



**Fig.3** Removed fetal parts and bones

### **Discussion**

Fetal maceration is mostly seen in case of cattle and is uncommon in the goat. Fetal maceration can be due to the non delivery of a dead fetus inspite of dilated cervix. The rapid bacterial invasion of the fetus and its membranes through the dilated cervix leads to maceration. Manual removal of fetal bones per vaginam should be attempted as reported previously (Purohit and Gaur, 2011; Mehta *et al.*, 2005). In contrast, Laparohysterotomy for removal of the macerated fetus is potentially dangerous. This must be considered as a last resort (Honparkhe *et al.*, 2008).

### **Conclusion**

A case of fetal maceration and its successful management in the goat has been reported.

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