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## Surgical Management of Fetal Maceration in a Doe Carrying Live Twin: A Rare Case Report

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#### **ABSTRACT**

This paper presents a successful surgical management of fetal maceration along with a live fetus in a Black Bengal doe. The animal was recovered uneventfully.

Key words: Doe, Caesarean Section, Maceration, Live Kid.

### INTRODUCTION

The fetus is known to be macerated when it dies inside uterus after ossification and its soft tissues undergo putrefaction and autolysis leaving only bones that remain floating in the uterus<sup>4</sup>. Fetal maceration has been reported in almost all the species however, it is rare in goats. Fetal maceration is the disintegration of a fetus and can occur at any stage of gestation<sup>6</sup>. Maceration is a common squeal of fetal mummification and occurs in the event of fetal death after formation of fetal bones (after 100 days of gestation) in small ruminants. Such animals fail to abort, although the cervix is moderately open<sup>5</sup>. This paper represents successful surgical management of fetal maceration along with live fetus in a Black Bengal doe.

A Black Bengal doe of 3 years age was presented to the Teaching Veterinary Clinical Complex, College of Veterinary Sciences & Animal Husbandry, R. K. Nagar, West Tripura with the history of labour since the previous night. As per the report of the owner, there was history of injury of the doe in the pelvic area by a motorcycle around two months back when the doe was about 3 months pregnant. However, the doe was recovered uneventfully from the accidental injury without hampering the pregnancy. Clinical examination revealed that the doe was depressed, dull, anorectic and exhibited intermittent straining. The rectal temperature was normal (102°F). It was also found that the vagina was swollen but no discharge.

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Per vaginal examination revealed that the cervix was fully dilated but the passage was narrow, the head of the fetus was anterior to external os cervix and there was a mild foul smelling brownish discharge from the vagina. The goat was restrained in lateral recumbency in an observation table. The goat was injected DNS (5%) along with corticosteroid parentally to reduce the stress. After proper lubrication, a blunt hook was placed in the lower jaw of the fetus but during traction, lower jaw was broken leading to delivery of the fetus and its became impossible to pervaginally due to the narrow passage of the cervix. Therefore, caesarean section was the method of choice. Hence, caesarean section

was performed as per the standard surgical procedure. During the operation, surprisingly, a live fetus was recovered along with pieces of bones of other macerated fetus (Fig. 1). However, the delivered kid died within the same day of operation as the jaw of the kid was broken and due to weakness (Fig. 2). Following surgery, the routine post operative procedure was taken which included parenteral injection of antibiotic along with other supportive therapy for 5 consecutive days. The surgical site was dressed locally with providone iodine. The suture was removed in due course. The animal was recovered uneventfully.



Fig. 1: Pieces of bones of macerated fetus



Fig. 2: Live fetus born with macerated fetus

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Previous reports revealed that rarely in goats one fetus may die in the first half of gestation and macerate and are expelled with the placenta and the normal twin fetus<sup>1</sup>. In this present case, there was a delivery of a live kid while other was macerated which is in agreement with the reports of previous researchers in non-descriptive goat<sup>1,7</sup>. Mehta et al.3, also reported a case of fetal maceration in doe where three fetuses were delivered normally and the fourth fetus was macerated. The cause of fetal death in the present case might be due to injury and infection as the goat had an accident around 3 months of gestation. Though, laparohysterotomy for removal of the macerated fetus is potentially dangerous, it must be considered as a last resort<sup>2</sup>, where manual removal is impossible as reported in this paper.

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 despite of a dilated cervix. This paper presents a rare case of fetal maceration along with a live fetus and its successful surgical management in a Black Bengal doe.

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