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Mummified Fetus in a black Bengal goat: A case study

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Abstract
Parturition is triggered by the Fetus. A black Bengal goat was presented at TVCC, Tripura with a history of hanging placenta since last night. The animal is Parturated one kid last night**.** The present case study highlights the relieving a mummified Fetus by manual method with a temperature history of 103˚ F, enlarged udder, vaginal discharge present and retention of placenta.

Keywords: black Bengal goat, mummified Fetus, enlarged udder

Introduction
Fetal death in domestic animals occuring in the middle or last third of gestation that does not result in involution of the corpus luteum & abortion of the fetus followed by mummification. Causes are some genetic factors, prolonged gestation, infectious cause of death of fetus like toxoplasmosis, chlamydophila, leptospirosis etc. It's possible that sex-related genes contributing to foetal mummification. It is mainly 2 types, hematic and papyraceous. A viscous adhesive material covers the mummified fetus. Mummification with dry, stiff fetoplacental unit with no exudates is called as papyraceous mummification.

Some genetic factors of mummification in other livestock - However, the recessive genes were present in the heterozygous condition, indicating that they were not the direct cause of the foetal death or mummification. Autosomal recessive genes have previously been linked to bovine foetal mummification. Deaton mentioned the involvement of autosomal recessive deadly genes in the mummification of cattle. Given that the abnormality was seen in some cow families for several generations and that the majority of the mummified fetuses were male, they hypothesised that the fatal gene may be sex-linked. 32 mummified fetuses were used to get the conclusion that the disorder is not caused by a single recessive deadly gene and that environmental factors are also at play. The fact that 75% of the mummified fetuses in that study were male, highlights the likelihood that some sex-related genes may be implicated in foetal mummification. We can indicate that more research is necessary to fully comprehend the function of sex-linked genes in goat foetal mummification.

Case History
A black Bengal goat of 4 years of age with 6 months pregnant was presented at TVCC, Tripura with a history of hanging placenta since last night at 9pm (Fig 01). The animal is parturated one kid last night**.** The animal has given birth of minimum 2 kids per calving usually. Vaccination was done 3-4 months ago. Mucous membrane of perineal region is pink (Fig 02). On gynaecological and physical examination, it was found that both vulval lips adhere tightly. Through the vulval lips, only 2-3 fingers were able to pass because of tight adherence or narrowing of both vulval lips. The feed and water intake were also compromised from 1 day.

Treatment
Initially, animal was restrained properly. The adequate lubrication of the Per-vaginal examination revealed a dead fetus with foul smell of vaginal discharge. After washing vaginal area with normal hot water, manual removal of placenta was done. 2 bolus of Furex was given intravaginally after complete removal of placenta so that remaining placental parts and other cellular debris can come out. After that Injection of Conmox with @2ml I/M for 5 days, Involon liquid @100ml orally stat followed by @50ml for 5 days, Min. Mix @20gm once daily orally for 15 days, Injection Melonex @1ml I/M for 3 days. Continuously 5 days follow up treatment was done by conmox and melonex.

The doe recovered fully after few days of continuous treatment.

Discussion and Conclusion

When normal parturition or abortion mechanisms fail, the fetus dies and is kept in the uterus, a condition known as foetal mummification (Arthur *et al*., 1989) [3]. According to reports, goats rarely exhibit foetal mummification, but it seems to be more common during twin pregnancies (Tutt, 1991) [12]. In this present case study, one mummified fetus was delivered. Ogbu *et al*. (2011) [11] also reported a case of dystocia due to dead fully developed fetus and smaller mummified fetus. A goat with a history of having one mummified fetus may have another one at any gestation period, hence the prognosis should be always guarded. This case was successfully managed per-vaginally and without any complication doe recovered.

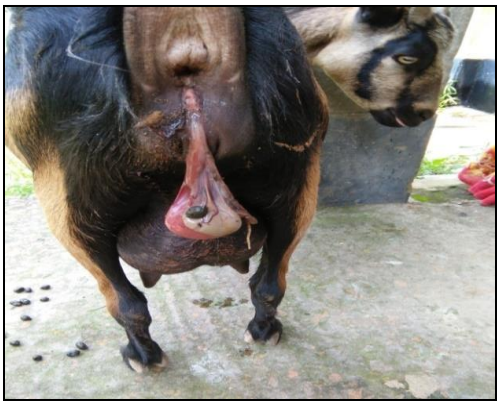

Fig 1: Hanging Placenta

Fig 2: Mucous membrane

Fig 3: Manual removal of placenta.

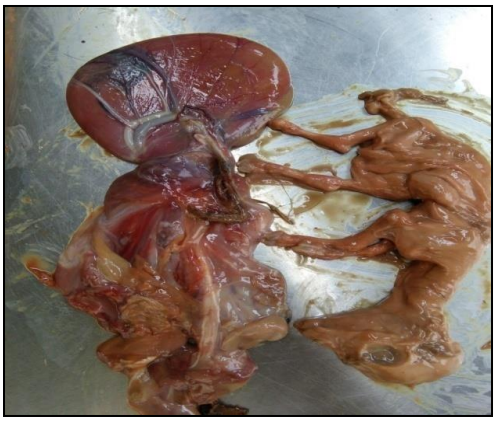

Fig 4: Mummified Fetus

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