

Case Report

A RARE CASE OF SUPERFETATION IN A PREGNANT DOE

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Abstract: A 4-years pregnant doe was presented with the history of completed gestation period but failure of complete parturition one day back. It was anorectic, restlessness with increased respiration and pulse rate. On per-vaginal examination, the cervix was fully dilated. After proper lubrication, two dead fetuses were removed manually by applying gentle traction. Size of both fetuses was dissimilar while one fetus was underdeveloped. It was a rare dystocia case of “Superfetation”. The goat was treated with fluid therapy, Antibiotic, Anti-inflammatory injections. It was recovered uneventfully within 5 days.

Keywords: Doe, Dissimilar, Superfetation.

I. INTRODUCTION

Superfetation is a condition when a pregnant doe give birth to kids with different gestational ages. After successful breeding, the doe cycled into second heat a few weeks later, and again bred, with both continued pregnancy (Spencer, 2013). Superfetation is a when second ovum is fertilized after there is already presence of an embryo in the uterine cavity (Alten, 2021). In this case, the foetuses with dissimilar size are born together. It is commonly observed in bitches than other farm animals and also rare in goats (Arthur *et al.*, 1989). Ozmen and koker, 2004 had observed superfetation and double parturition in a sheep.

Superfetation can only occur in goats (or other animals) that have a heat cycle shorter than the length of pregnancy. Seasonal breeders cycle every 18-21 days during the “heat” season. Because there are three weeks between ovulations, a second pregnancy in superfetation would be underdeveloped when the first is ready for birth. It is unlikely that the underdeveloped kid would be able to survive. However, there have been a few documented instances of an animal giving birth to fully developed young several weeks apart (Rebecca, 2022).

II. HISTORY AND CLINICAL OBSERVATIONS

A pregnant goat of 4 years old with the history of completed gestation period as per the owner was presented at Veterinary Clinical Complex, Nagpur Veterinary College, Nagpur. There was a complete failure of parturition since one day back. The doe was straining continuously with restlessness and also off-fed with increased respiration and pulse rate. The cutaneous mucous membrane was pale. On per-vaginal examination cervix was fully dilated, reddish discharge was observed with vulval oedema. The presentation and position were noted to be anterior and dorso-sacral with postural defect i.e., downward deviation of head. No fetal responses were found. It was a case of foetal dystocia due to downward deviation of head.

III. TREATMENT

Deviation of head was corrected manually with proper lubrication by using carboxyl methyl cellulose gel. The two dead foetuses were withdrawn successively by applying gentle traction. The doe was administered with Fluid therapy, Antibiotics, Analgesics and Antihistamine injections and Supportive therapy along with intrauterine Furea bolus. The animal had recovered successfully within 5 days.



Fig.1: Pregnant doe



Fig.2: Dead Dissimilar sized fetuses

IV. DISCUSSION

The two removed dead fetuses were of different sizes in which one fetus was almost fully developed and the other was underdeveloped for which the gestation period might not be completed. It was diagnosed as a rare case of “Superfetation”. The doe might

had come into estrus, usually at heat period after conception and bred again, carried the second pregnancy also. The foetuses conceived in first cycle sometimes delivered first and remaining litter must be deliver after completion of second gestation period.

Raghuwanshi *et.al.*, (2014) also described two superfetation cases of goats in which, female fetus was premature and underdeveloped whereas males were live and fully mature. Markandeya *et.al*, (2004) described a rare case of twin pregnancy which terminated in double parturition (13 days apart) in a heifer cow which concluded the superfetation. In conclusion we feel this case adds to the literature of doe superfetation.

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