

*Short Communication*

## TWIN FETAL HYDROPERITONEUM ASSOCIATED WITH EARLY MUMMIFICATION IN A NON DESCRIPTIVE DOE

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**ABSTRACT**

Foetal mummification associated with foetal hydroperitoneum is a rare phenomenon which causes dystocia in farm animals. However, foetal hydroperitoneum is a simple condition which occurs most commonly in cows and causes dystocia. The present case report presents a rare case of foetal mummification associated with hydroperitoneum in a non-descript doe.

**KEY WORDS:** Doe, mummification, hydroperitoneum, dystocia.

**INTRODUCTION**

Mummification is an aseptic modification of dead foetus after the onset of ossification which is not normally expelled from the uterus and the condition commonly occurs during second and third trimester of pregnancy (Roberts, 1971). During foetal mummification the dead foetus remains in the closed uterus and the foetus with body fluids reabsorbed and the foetus becomes dry and paper-like texture (Jackson, 2004). Hematic type of mummification is more common in cattle and the papyraceous is found in other species of animals (Roberts, *loc.cit.*). However, Foetal hydroperitoneum is occasionally seen as a cause of dystocia in any species but occurs most commonly in cows. Accumulation of transudate in the foetal peritoneal cavity may be due to dropsical condition of the uterus, mesothelioma of foetal abdomen and brucellosis (Roberts, *loc. cit.*). Affected foetuses are often dropsied and if the foetus is full term it may cause dystocia (Noakes *et al.*, 2009).

**MATERIALS & METHODS**

A five years old non descriptive doe on fourth parity was presented with the history of straining since previous night



**FIGURE 1:** Radiography showing distorted skeleton of mummified foetuses

to Large Animal obstetrics unit Madras Veterinary College Teaching Hospital, Chennai-7. On inquiry of the owner it was reported that previous kidding was through C-section. Physical examination revealed all vital parameters were in normal physiological range. On abdominal palpation, foetal mass could be palpated and per-vaginal examination revealed one finger dilatation of external os. Radiographic examination revealed presence of foetus (Fig. 1) with absence of foetal fluids suggestive of mummified foetus.

**RESULTS & DISCUSSION**

The animal was treated with Induction by using Inj.Oxytocin-5IU intramuscular and 5% dextrose-150ml intravenous. The animal has shown straining after 40 minutes of induction and on vaginal examination; one dead foetus was present on the vaginal passage. The dead male foetus was removed by gentle traction after thorough lubrication of vaginal passage. Further, another mummified foetus located at the cervical canal was removed by gentle traction. The doe was treated with Inj.Ceftriaxone-500mg intravenous and 20ml Wokadine IU intrauterine.



**FIGURE 2:** Twin mummified foetuses associated with hydroperitoneum

The doe had an uneventful recovery. Gross examination of the foetuses revealed mummification associated with hydroperitoneum (Fig. 2). Crown Rump Length (CRL) of both foetus was 10.6cm suggestive of approximately 60 days of gestation. The protein content of the peritoneal fluid was 3.4g% indicating the fluid is transudate in nature. On postmortem examination, hepatomegaly and liquefaction were noticed in the liver. Histopathological examination of kidney revealed normal histology of developmental stage whereas liquefactive changes were observed in the liver. The occurrence of foetal hydroperitoneum in association with mummification is a very rare condition in domestic animals. The foetal death in domestic animals occurring during middle or last third of gestation might lead to the abortion of the foetus or decomposition or maceration which is followed by autolytic changes of the foetus, absorption of foetal fluids, involution of the maternal placenta and mummification of foetus (Roberts, *loc. cit.*). In the present case foetal mummification was associated with hydroperitoneum, which might be due to cardiovascular, pulmonary, hematologic, hepatic or lymphatic system abnormalities results to initiation of foetal mummification which is evident by the shrunken orbit, partial colour change

in the foetal skin and persistence of fluid in the peritoneal cavity.

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