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A Rare Case of Dystocia Due to Hydroamnion Coupled with Fetal Anasarca in a Doe

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ABSTRACT

A non-descript doe was presented with the complaint of excessive bilateral abdominal distension and with unknown breeding history. Ultrasound examination revealed excessive anechoic area in uterus along with two fetuses. On caesarean section, dropsy of amnion was observed and one normal fetus co-twin with "bulldog" anasarcous fetus was removed.

Key words: Anasarca, Dystocia, Goat, Hydroamnion.

INTRODUCTION

Dystocia due to fetal causes are common and varies between 8 to 50 percent in sheep and goats (Purohit, 2006). The incidence appears to be higher in dams carrying single or male fetus and is generally due to abnormal disposition of the fetus (Purohit, 2006). Dropsy of fetal membranes and fetus is a less common finding in small ruminants (Prabaharan *et al*., 2016). Fetal anasarca is generalized dropsy of the fetus and is rarely associated with mild degree of hydrops of fetal membranes. The condition is ascribed to be caused by autosomal recessive character. The hydrops of amnion has also been found to be associated with "bulldog" fetus and occurs due to impairment in swallowing by the defective fetus (Roberts, 1971). The case of fetal ansarca with hydroallantois has been reported (Philip *et al*., 2012). However, the anasarcous fetus with dropsy of amnion has not been reported yet. Therefore, the present report describes a dystocia due to hydroamnios coupled with anasarca in "bulldog" fetus in the doe and its management.

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CASE HISTORY AND CLINICAL OBSERVATION

A 14 month old primiparous non-descript doe was presented to the Referral Veterinary Polyclinic of Indian Veterinary Research Institute, Izatnagar. There was a history of excessive bilateral abdominal distension since 20 days. The doe was anorectic and showing mild degree of rectal prolapse from one last week. The doe was in advanced stage of gestation but exact date of mating was unknown.

Clinical examination revealed extensive bilateral abdominal distension with mucus hanging through vulva and mild degree of rectal prolapse. The doe was dull, reluctant to move, showing severe respiratory distress along with tendency to sit down. The rectal temperature was 102.6°F.

No fetus or fetal parts could be palpated on abdominal palpation due to highly distended abdomen and discomfort to the doe. Per-vaginal examination revealed one finger dilatation of cervix. Ultrasoun dexamination indicated presence of extensive anechoic area along with fetal structures. Doppler ultrasonography revealed blood supply to only one fetus having heart rate of 205 beats/minute. Due to the poor health condition of the doe, immediate decision for caesarean section was taken.

TREATMENT AND DISCUSSION

A 4 ml Dexamethasone (Dexona® Zydus AHL, Ahmadabad, India) was given by slow intravenous along with 0.9% normal saline.The doe was restrained in right lateral recumbency and caesarean section was performed by oblique ventrolateral approach. Excessive amniotic fluid was drained out slowly. One dead female fetus along with another fetus that also died within few minutes after removal was delivered. Examination of the fetuses revealed one anasarcous fetus with comparative shortened forelimbs associated with edematous face and ears indicating "bulldog" monster fetus. However, the other fetus was found to be normal in appearance. The post-mortem examination showed small size and fragile viscera in anasarcus fetus as compared to normal one. As the doe was normal and alert post surgery, thus was discharged together with medicinal therapy including 3 ml Enrofloxacin (Enrocin® Vetnex Animal Health Ltd, New Delhi, India), 3 ml Meloxicam (Melonex® Intas



Fig 1: Anasarcous "bull dog" fetus relived from doe.

Pharmaceuticals Ltd, Ahmadabad, India) intramuscularly daily for 3 days and owner was advised to follow the same.

The hydroamnios carrying "bulldog" calf is common in cattle and is occasional in other animals (Roberts, 1971). The exact cause of fetal anasarca is unknown but could be placental origin as oftenly found associated with edematous fetal membranes (Sloss and Dufty, 1986). In this case, the hydroamnios could be the cause of disturbance in the fluid exchange leading to excessive accumulation of fluid in subcutaneous tissue of fetus (Prabaharan *et al*., 2016). Similarly, anasarca is found to be associated with "bulldog" fetal monster and may affect either one or both fetuses in twin pregnancy (Long, 1996). The anasarcous fetus can be relievedby forced traction however; caesarean section is required in severe cases or fetal monstrosities (Roberts, 1971; Philips *et al*., 2012).

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