Case Report

DYSTOCIA DUE TO FOETAL ANASARCOUS CO-TWIN IN A KANNI DOE AND ITS OBSTETRICAL MANAGEMENT

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ABSTRACT

A full term pluriparous Kanni doe was presented with the history of difficulty in parturition, bloody vaginal discharge and straining. Based on the obstetrical examination, the case was diagnosed as dystocia due to foetal anasarca. The present communication places on record the successful per vaginal delivery of a foetal anasarcous co-twin.

Key words: Doe, Dystocia, Foetal anasarca

Dystocia occurs most commonly due to faulty presentation, position and posture of foetus, along with foetal anomalies and monsters. Dystocia due to foetal causes varies between 8 to 50 per cent in sheep and goats (Purohit, 2006). Foetal anasarca is generalized dropsy of the foetus and is rarely associated with mild degree of hydrops of foetal membranes. Anasarca is less commonly reported in small ruminants (Prabaharan *et al.,* 2016). It has been observed mainly in calves, but occasionally in kids and foals (Craig, 2000). Foetal skin and subcutaneous tissue get accumulated with voluminous quantity of fluids which may cause serious birth problems (Jackson, 2004). A foetal monster usually has severe physical damage that affects its appearance but may not cause its death in the uterus. Foetal monsters arise from adverse factors affecting the foetus in the early stages of its development which are mostly of genetic origin but may also include physical, chemical and viral factors (Jackson, 2004; Chandrasekaran *et al.,* 2015). The present communication places on record a case of dystocia due to foetal anasarca as a co-twin with a normal dead foetus and its successful per-vaginal delivery in a Kanni doe.

A three-year old full term pluriparous Kanni doe in her third parity was presented

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to the Large Animal Obstetrics Unit, Madras Veterinary College Teaching Hospital with the history of difficulty in parturition, bloody vaginal discharge, ruptured water bag and straining for the past 10 hours. On clinical examination, vulva was swollen and an oedematous head and forelimbs of the foetus were noticed outside the birth canal. On per vaginal examination, the cervix was fully dilated with a large sized disproportionate foetus which was fluctuating on pressure in anterior longitudinal presentation (P1), dorso-sacral position (P2) with extended forelimbs and head (P3). Based on the clinical examination, the case was diagnosed as dystocia due to foetal anasarca.

Under epidural anaesthesia with 2% lignocaine and sufficient lubrication, a dead male anasarcous foetus was delivered first by manual traction and after that another dead female normal foetus was also delivered. (Fig.). Further, the doe was treated with Inj. Enrofloxacin @ 5mg/kg, Inj. Meloxicam @ 0.2mg/kg IM Inj. Chlorpheniramine maleate @ 0.5mg/kg and Inj. Oxytocin @ 10 IU for the next three days and the animal had an uneventful recovery. The incidence appears to be higher in dams carrying single or male foetus and is generally due to abnormal disposition of the foetus (Purohit, 2006). The cause was not definite but it might result from a circulation disturbance in the liquid exchange might be

Fig. Anasarcous foetus co-twin with a normal foetus

of placental origin and often associated with edematous fetal membranes. Roberts (2004) reported that foetal anasarca may develop in a single foetus or one of the twins and associated with achondroplasia or bull dog calves and was due to simple autosomal recessive gene. Rarely mild hydrops of the amnion or allantois and oedema of the placenta may accompany foetal anasarca (Jayachandra *et al.,* 2013). The fluid effusion accumulation in subcutaneous space might be due to lack of lymph nodes and existence of autosomal recessive allele which affect the embryological development of normal lymph nodes (Chandrasekaran *et al.,* 2015). Usually, the affected foetus is carried to full term and there is lack of progress in second stage of labour, which is due to foetal oversize caused by fluid accumulation in subcutaneous tissue with a distended abdomen (Long, 1996). Most anasarcous foetuses are expelled dead. When the foetus poses difficulty in its delivery, cuts may be given over the skin at many places to release the fluid or fetotomy and/or forced extraction may be used to deliver the fetus. Surgical intervention is usually required for the delivery of oversized anasarcous fetus (Kumar *et al.,* 2005). The present paper reports a case of dystocia due to foetal anasarca as a co-twin with a normal foetus and its successful per-vaginal delivery in a Kanni doe.

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