

DYSTOCIA DUE TO FETAL GOITER IN A GOAT-A CASE REPORT

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SUMMARY

A case of dystocia due to fetal goiter in a goat is reported. A live fetus with a large swelling in the cranio-ventral neck region was delivered successfully but the fetus died within a few minutes after delivery. Examination of the fetus revealed the presence of enlarged thyroid gland with too asymmetrical lobes and the skin was thick with myxedema, pale and without hair.

Key words: Congenital goiter, dystocia, goat, subabul feeding

Congenital goiter is a non-inflammatory and non-neoplastic enlargement of thyroid gland in the fetus and is regarded as a common anomaly in goats (Ani *et al.*, 1998). Iodine deficiency in goats has been reported to be the common cause of congenital goiter in kids (Bires *et al.*, 1996). The present paper describes an unusual case of congenital fetal goiter in a kid leading to dystocia.

A full term pregnant goat in its first parity weighing about 40 kg was presented at Veterinary Ambulatory Clinic, College of Veterinary Sciences, Hyderabad with a history of continuous straining and attempting to deliver the fetus. The amniotic sac ruptured about two hours ago, but the animal failed to deliver the fetus and no fetal parts were visible through vulva.

After epidural anesthesia, perineal area was washed with antiseptic solution and animal was examined per vaginam. The birth canal was completely dilated and the fetus was in anterior longitudinal presentation. Per vaginam examination of the fetus revealed the presence of a swelling below the neck and it was decided to remove the fetus by traction after proper lubrication of the birth canal. An obstetrical hook was inserted in the eye socket and a gentle traction on fore limbs and head resulted in the successful delivery of the fetus. A live fetus weighing about 3kg was delivered and the kid died within 10 min. Physical examination of kid revealed the presence of a swelling at cranio-ventral neck region. After the delivery of the fetus the dam was administered Inj. Enrofloxacin (5mg/kg BW; IM), Inj. Meloxicam (0.2 mg/kg BW; IM) and bolus Involon (Natural remedies; one bolus daily orally) for 5 days and the animal recovered without any complication.

Further examination of the fetus revealed the presence of enlarged thyroid gland with two asymmetrical lobes. The skin of the kid was without hair, pale white and was very thick with myxedema (Fig. 1). Such type of the condition has been described as congenital goiter (Cheema *et al.*, 2010) which mainly occurs due to continuous feeding of subabul and iodine deficient diets (Sastry and Singh, 2008). In the present case, the animal was kept on subabul leaves. The dystocia in the present case occurred due to fetal goiter and similar type of cases have previously been reported in sheep (Radostits *et al.*, 2007) and goats (Bires *et al.*, 1996). Dystocia due to fetal goiter in doe has also been reported by Cheema *et al.* (2010) and Kumar *et al.* (2014).

It has been reported that feeding of subabul (*Leucaena leucocephala*) not only causes hypothyroidism and reproductive failures in the female goats but also results in congenital goiter in kids (Sastry and Singh, 2008). It has been observed that major toxic constituents of subabul are the non protein free amino acid mimosine and its



Fig. 1: Swelling at cranio-ventral neck region of kid, myxedema of the face

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ruminal degradation product such as 3 – hydroxyl – 4 (1 H) – pyridone (3,4 di hydroxy pyridine;3,4 DHP). In ruminants, mimosine acts as a depilatory agent and 3,4 DHP is reported to be a potent goitrogen (Hammond, 1995).

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