Short Communication

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Successful Management of Dystocia due to Fetal Anasarca in Osmanabadi Goat

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ABSTRACT

A three year old Osmanabadi goat was presented to the Veterinary Clinical Complex, Udgir with the history of difficulty in parturition. Upon per vaginal examination revealed the anasarcous monster which was removed with obstetrical manoeuvring and the dam was treated with antibiotic, analgesics and fluid therapy.

Key words: Anasarca, Dystocia, Fetal monster, Goat.

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INTRODUCTION

In goats and ewes, the fetal anasarca and fetal ascites are occasionally seen. It is a congenital defect due to recessive autosomal gene leading to blood and lymphatic abnormality. This causes generalised oedema to the fetus. The excessive accumulation of the fluid in the body and tissues causes subcutaneous oedema (Roberts, 1971). The other factors that affect the early stage of development of fetus and responsible for development of fetal anasarca are physical, chemical and viral (Jackson, 2004). The forms of fetal monsters that causes dystocia includes Schistosomus reflexus, Perosomus elumbis, hydrocephalus, fetal anasarca, fetal ascites and chondroplastic monsters etc. (Arthur *et al.,* 1996).

CASE HISTORY AND OBSERVATIONS

A three year old Osmanabadi goat in first parity was admitted to the Veterinary Clinical Complex, Udgir with the history of straining since 18 hours. According to the history, the case was handled by a quack and posterior part of the fetus along with the hind legs were removed due application of excessive traction. Upon clinical examination,

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it was revealed that the goat was suffering from hypothermia, dehydration and behaviour was dull and depressed. The udder was engorged and vulval lips were swollen with congested and lacerated vaginal mucous membrane. The reddish vaginal discharge was also present.

On per-vaginal examination, the bony part of lumbar vertebrae was palpated. On further detail examination, it was palpated that the fetal hooves were swollen abnormally and there is a generalized swelling of the fetus. According to the per-vaginal examination, the case is tentatively diagnosed as dystocia due to fetal abnormality.

TREATMENT AND DISCUSSION

The fetal presentation of the monster was posterior and the futile efforts were made by local quack, resulting in further complication. Both the hind legs and the lumbar portion of the fetus was removed by local quack as shown in Fig. 2.

Fig. 1. Anasarcous fetus

As the fetus was in posterior presentation and the legs and major lumbar portion of the fetus were removed, it was decided to rotate the fetus intravaginally. After identification of the head, the fetus was rotated within the uterus using ample amount of lubrication and both the forelimbs were extended in birth canal. The fetus was brought in normal anterior longitudinal presentation, dorso sacral position with extended fore legs and head in the birth canal. Co-ordinated traction was applied using cotton rope and generous lubrication was used to facilitate the delivery of the fetus. Anasarcous fetus with accumulation of fluid in the subcutaneous tissue was delivered (Fig.2).

After delivery of the fetus, the goat was treated with inj. Adchrome 2ml, inj. Meloxicam @ 0.5 mg/kg BW intramuscularly, fluid therapy using Inj. Dextrose 5% @ 250 ml, Inj. Lactated ringer's solution @ 250 ml and inj. Ceftriaxone and Tazobactum @20mg/kg BW intravenously. The uterine cleansing agents containing urea and nitrofurazone were kept in uterus. Herbal uterine ecbolics were also advised for oral administration. The doe completely recovered after three days of treatment. Xray examination of the fetal monster (Fig. 2) revealed that, there was deformity in facial bones but other skeleton from skull to thoracic region was normal. The lungs were not developed and the soft tissues all around the body were abnormally overgrown. The subcutaneous accumulation of the fluid was also seen all over the fetal body, confirming that the case is of dystocia due to fetal anasarca.

Fig. 2. Xray of fetus - Deformity of facial and skeleton

Dystocia is one of the most important factors responsible for economic losses to the farmers due to losses of fetus and dam (Arunpandian *et al.,* 2023). Fetal anasarca may develop in a single fetus or one of the twins (Borakhatariya *et al.,* 2017). Sarangom *et al.,* (2020) reported the concurrent cases of fetal anasarca and fetal ascites born along with live fetus. The condition may be caused by simple autosomal recessive gene which affect the fetus and carried to full term. The other factors responsible for development of anasarca are liver dysfunction, protein or Vitamin deficiency (Ghuman *et al.,* 2011).

The lack of progress in second stage labour due to increase in fetal size caused by accumulation of excess of fluid in subcutaneous tissue and distended abdomen results in dystocia (Prabaharan *et al.,* 2016). The antenatal diagnosis of such cases using ultrasonography is seldom possible and if diagnosed early, medical termination of pregnancy is recommended (Kumar *et al.,* 2020). The delay in attending such cases may lead to develop emphysema in the dead fetus which aggravate the condition resulting in dystocia (Kumar *et al.,* 2005). Forced

traction with proper lubrication is usually necessary to remove the anasarcous fetus. (Ghuman *et al.,* 2011). The dystocia develops at the time delivery due to oversized fetus. Fetotomy and evisceration are necessary for the delivery of the oversized fetus (Singh *et al.,* 2007). The cases in which vaginal delivery of the fetus is not possible, surgical intervention in necessary to remove the oversized fetus (Kumar *et al.,* 2020) and dystocia due to goitre (Kumar *et al.,* 2014). In present case, the successful management of dystocia due to fetal anasarca by obstetrical maneuver is reported.

CONCLUSIONS

Fetal anasarca is congenital defect that causes excessive accumulation of the fluid in the subcutaneous tissue. Non-surgical delivery of the fetus using forced traction and generous lubrication is necessary to maintain the future fertility in the goats.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interests.

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