

SURGICAL MANAGEMENT OF DYSTOCIA IN AN ASSAM HILL GOAT : A CASE REPORTN. AHMED^{1*}, M. P. BAISHYA², J. M. DAS¹, A. DAS¹, P.K. BORO³, S. N. YADAV³ and B. K. SARMA²¹Department of Animal Reproduction, Gynaecology and Obstetrics²Department of Veterinary Surgery and Radiology³Department of Veterinary Medicine Veterinary Clinical Complex,

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Received : 06.03.2019; Accepted : 13.03.2019

SUMMARY

A one year old Assam Hill goat in first parity and full term gestation was presented with the history of prolonged labour since 15 hours. On examination, the cervix was found open but due to narrow pelvis manual manipulation of the fetus was not possible and only the dorsal portion of the fetal neck was felt by fingers. On the basis of clinical observations and radiographic examination, the case was diagnosed as dystocia due to small pelvis of the dam and nape presentation of the fetus. By caesarian section a dead fetus along with marked deviation of head and flexed right forelimb was recovered. The dam recovered uneventfully.

Key words: Assam Hill goat, Dystocia, Narrow pelvis, Nape presentation, Radiography

Dystocia is one of the most contributory factors in peri-natal death of dam and newborns in small ruminants including goats, causing economic loss to farmers (Ali, 2011). The occurrence of dystocia may be either due to maternal or fetal causes but sometimes both contributed together (Bhattacharyya *et al.*, 2015). Successful management of dystocia depends upon the correct diagnosis of its causes and adoption of suitable corrective measures. The present communication reports a case of dystocia in Assam Hill goat due to fetal and maternal causes along with its confirmatory diagnosis and successful management.

A one year old Assam Hill goat in first parity and full term gestation was presented to the Veterinary Clinical Complex, Lakhimpur College of Veterinary Science, Assam Agricultural University, Joyhing, North Lakhimpur, Assam, India with the history of prolonged labour since 15 hours. On general inspection the animal was found depressed and exhausted due to prolonged recurrent straining along with protrusion of the left forelimb (above the point of elbow joint) of fetus from the vulva (Fig. 1).

During clinico-gynaecological examination, the cervix was found open but due to narrow pelvis, manual obstetrical manipulation of the fetus was not possible, only the dorsal portion of fetal neck was felt by fingers. Radiography was conducted to confirm the number of fetuses as well as their position and posture. On radiography, single fetus in nape presentation and with right shoulder flexion was confirmed (Fig. 2). In the present case, manual obstetrical manipulation and vaginal delivery could not be performed due to abnormally narrow pelvis of the goat. For immediate relief, cesarean section was performed at the left paralumbar fossa in right lateral recumbency and one dead fetus was delivered with marked deviation of head and flexed right forelimb (Fig.3).

The goat was treated with parenteral antibiotics (Ceftriaxone @ 20 mg/kg b. wt. i/v.), NSAID (Meloxicam

@ 0.5 mg/kg b. wt. i/m.) and supportive multivitamins for five consecutive days. In the present case, the goat was recovered uneventfully following successful caesarean section.

Several workers reported that caesarean section becomes necessary in goat to relieve dystocia due to relatively oversized fetus and narrow pelvis of the dam when manual obstetrical operations are difficult for vaginal delivery. (Roberts, 1971; Tibary, 2004; Hussain and Zaid, 2010).

In this case, the fetus was dead which may be attributed to undue delay in presentation of the case. This was in agreement with the findings of others as survivability of fetus is significantly affected by the length of time lapse between commencement of labour and the time of presentation for caesarean section (Sharma *et al.*, 2014; Jyothi *et al.*, 2015). Brounts *et al.* (2004) recommended that small ruminant dams should be referred for obstetrical help within 2 hours from the onset of second



Fig. 1: Assam Hill goat with left forelimb of fetus protruding from vulva

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Fig. 2: Nape presentation (Radiographic image)



Fig. 3: Fetus with marked deviation of head and flexed forelimb

stage of labour if no progress in delivery is observed. However, Successful management of dystocia depends on the proper diagnosis of causes of dystocia (Aziz and Taha, 1996).

Dystocia during first delivery and probably due to the narrow pelvis of the dam may be because of breeding the animals at young age and/or poor state of nutritional management during gestation. Feto-pelvic disproportion has been reported as one of the main causes of dystocia in cattle (Dhaliwal, 1979) and ewes (Brounts *et al.*, 2004). In goat, downward deviation of head (nape presentation) with only one forelimb protruded through the birth canal as observed in the present case is not uncommon. In this case, continuous expulsive straining efforts and blockade of the maternal pelvis due to abnormally small pelvic diameter might have aggravated the condition to more severe downward deviation of fetal head.

Dystocia is life threatening for both the dam and fetuses which needs immediate intervention. Proper diagnosis of causes of dystocia is very important to adopt accurate obstetrical operations. Radiography could be a tool to diagnose different causes of dystocia in small animals when other methods fail to do so. Moreover, we suggest better awareness among farmers on breeding age as it is a major reason of dystocia in primipara.

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