

DYSTOCIA DUE TO ARTHROGRYPOSIS MULTIPLEX CONGENITA IN A GOAT

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ABSTRACT

A case of dystocia in an indigenous goat due to arthrogryposis multiplex congenita monster fetus with angulation of hock joint and kyphosis of dorsal spine was successfully removed by application of judicious manual traction.

Key words: Congenital arthrogryposis, kyphosis, Monster, Goat.

INTRODUCTION

Arthrogryposis multiplex congenita (AMC) is a rare congenital syndrome in which there is malformation involving multiple joints resulting in stiffness or limited movements, change of posture and limb function due to permanent contracture of joints and wasting of muscles usually occurring at early stage of gestation (Khodakaram-Tafti et al., 2014). The present case report describes a rare condition of congenital arthrogryposis monster fetus with angulation of hock joint and kyphosis causing dystocia and its successful obstetrical management in an indigenous goat.

CASE HISTORY & OBSERVATION

An indigenous goat of about 4 years of age was presented to the Teaching Veterinary Clinical Complex, CVSc & AH, OUAT, Bhubaneswar with the history of unproductive labour pain for 3 hrs after rupture of the water bags. The goat was reared under traditional husbandry practices through open grazing pastures and kept in a herd with other bucks and does. It had delivered several times before with a single normal kid each time. The animal was restless, continuously bleating and flicking its tail. No parts of the foetus were visible outside vulva. Slight edema of vulval lips was observed. On per vaginal examination it was revealed that there was presence of the foetus in anterior longitudinal presentation with rigid contracted forelimbs at fetlocks and pasterns. There was continuous straining observed with complete dilatation of cervix and vagina. There were no pedal or suckling reflexes observed in the kid, hence routine obstetrical procedures were adopted to relieve the dead foetus.

TREATMENT AND DISCUSSION

The doe was restrained properly by epidural anaesthesia with 2ml of xylocaine injected into sacro-coccygeal space. Intravenous fluid therapy (5% DNS 300ml) was supplied. The vaginal passage was lubricated with liquid paraffin. Livability tests of the fetus revealed absence of any fetal reflexes. Hence, the foetus was delivered per-vaginally by applying judicious manual traction

very carefully in order to prevent any injury to the genital tract. Post-parturient x-ray of abdomen ruled out any presence of fetal mass. The course of antibiotic (ceftriaxone-500mg), anti-inflammatory (Meloxicam) & fluid therapy was administered immediately. Routine antibiotics & supportive therapy was continued during the post operative period. The doe had shown an uneventful recovery.

Examination of the delivered fetus revealed that there were angulations of hock and elbow joint, rigidly ankylosed fetlock and pastern joint in both fore limbs and hind limbs. Rigidity of joints made the forelimbs to be placed wide apart from each other. Brachygnathism with marked kyphosis of dorsal spine was observed. Examination of placenta revealed reduced no of placentomes with normal amount of placental fluid. Similar observations in Sheep were reported by Anusha and Naidu (2015), Raja et al., (2016) and Palanisamy et al., (2018) which were relieved either by forced traction, fetotomy or caesarean section. In such cases, the extent of fetal malformation decides the type of intervention to be provided for easy parturition. Roberts, (1971) correlated arthrogryposis with a single recessive gene resulting in expulsion of dead fetus with flexed limbs in sheep & goat. Variable causative factors have been attributed to AMC starting from the extrinsic factors like insufficient room in the uterus, fetal crowding to intrinsic factors like malformation in muscles, central nervous system, spinal cord and connective tissue; however the major cause for the arthrogryposis is fetal akinesia (Mallikarjunappa and Shruthi, 2013).

In the present study, dystocia was caused due to arthrogryposis multiplex congenita monster fetus in a goat and was relieved by judicious manual traction.

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