

Therapeutic wWith oObstetrical mManagement to dDeliver lLive tThree mMale fFoetuses in a Surti dDoe

ABSTRACT

Dystocia is a common occurrence ~~ing occasionally~~ in small ruminants like goat and sheep. A paper reports a present case tentatively diagnosed as a foetal dystocia due to foetal dorso-pubic position and malpostures of foetus in a seven year old surti doe based on the history, clinical signs and vaginal examination ~~with incomplete cervical dilatation~~. The present case describes a successful delivery of three live male foetuses by obstetrical mutational approach following therapeutically intravenous administration of 20IU- Oxytocin, 30 ml- calcium borogluconate and 500 ml Normal saline, whereas 5 ml valethamate bromide and antihistamine were administered intramuscularly. Using Supportive therapy various fluids, analgesic, antibiotic and intra-uterine passaries, resulted affected Surti doe to normal health ~~of affected Surti doe~~ within few days.

Key Words: Dorso-pubic position, Postural abnormalities, Dystocia, Surti doe.

INTRODUCTION

Dystocia means difficult birth; the diagnosis and treatment of dystocia constitute a large and important part of the science of obstetrics, and require a good understanding of normal parturition (Arthur, 2001). Malpresentation is one of the common causes of dystocia especially in case of with twin pregnancy (Noakes *et al.*, 2009). The incidence of dystocia varies between 8 to 50% in both sheep and goat and appears to be greater in dams carrying single male foetus than in..... (Purohit, 2006). Close examination of the foetus in the birth canal will readily reveal the cause for dystocia. Dystocia can be caused by either maternal or fetal problems. The majority of cases are reported by are foetal problems, mainly malpresentation, abnormal position or posture of the foetus. The paper present case is a documentary record of foetal dystocia due to abnormal position (dorso- pubic) and posture (carpal & shoulder flexion) of foetus with incomplete cervical dilatation in a Surti doe and its successful management ~~to relieve dystocia~~ per-vaginally.

MATERIALS AND METHODS

Case History, Clinical observation and Pre-medicinal treatment

A seven year old Surti doe in its 5th parity was presented to the Animal Obstetrics unit of Dr. V. M. Jhala Clinical Complex,.... (complete address) with ~~the a~~ history of complete gestation

period, straining, restlessness and tenesmus since last one day and water bags which had already ruptured a before few hours ago. Physiological parameters recorded ~~were in the normal clinical range~~; temperature, (103.9 °F) and respiration rate (42/minute) were in the normal clinical range ~~and~~ while the heart rate was slightly elevated (79/minute) ~~slight~~ indicating mild tachycardia). The goat was partially anorectic, dull, depressed and slightly dehydrated with standing condition. The doe was frequently getting up and down showing extreme abdominal pain.



Fig 1: Pinkish Conjunctival mucus membranes



Fig 2: Mammary glands fully engorged with milk



Fig 3: Abnormal Dark Reddish colored discharged was observed

Fig. 1 mucous

Clinical examination revealed pinkish conjunctival (Fig. -1) and vaginal mucous membranes, mammary glands fully engorged with milk (Fig. -2), tinched vulval lips with abnormal dark reddish colored discharge and ~~also the~~ dark reddish chocolate coloured discharged ~~was observed~~ on the floor (Fig. -3). Abdominal ballotement ~~& and~~ palpation revealed ~~that the~~ doughy freely moveable masses on the flank region (which flank- right of left?) suggesting ~~ed~~ the presence of foetuses. On proper lubrication using liquid paraffin with antiseptic, per-vaginal examination revealed that vagina was relaxed; cervix had only was four finger dilatation~~ed~~, so that it was difficult reach up to the foetus, & touch or palpated. So, decided to pre-medicated ~~at the~~ doe (Fig. -4) with intravenous administration of 3.0 ml-Dexamethasone[®], 20IU_-Oxytocin[®], 500ml_-Normal saline, and 30ml_-calcium borogluconate, whereas 5 ml valethamate bromide (Epidosin[®]) was given intramuscularly. Per-vaginal examination three hours following ~~On Completion of~~ pre-medicinal treatment ensuring adequate precautions after three hours, ~~per-vaginal examination~~ (Fig. -5) ~~with proper lubrication using liquid paraffin and antiseptic~~ revealed a fully dilated and relaxed ~~that~~ cervix was fully dilated & relaxed with; a live foetus ~~palpated with in~~ anterior-longitudinal presentation, dorso-pubic position and bilateral flexion of carpal ~~& and~~ shoulder joints lying beneath the body of foetus. Forehead of foetus was palpable at pelvic brim, but the foetal abdomen was found greatly distended above the brim and tense with lot of fluid. Based on the history, ~~a~~ clinical signs and per-vaginal examination, the present case was diagnosed as a foetal dystocia due to fetal dorso-pubic position with malpostures and incomplete cervical dilatation.



Fig 4: Doe was pre-medicated



Fig 5: Specific antiseptics per-vaginal examination

OBSTETRICAL AND THERAPEUTIC MANAGEMENT

Following confirmatory diagnosis of foetal dystocia due to fetal malposition and malpostures, ~~and the~~ careful repelling of the foetus into abdominal cavity of doe was done.; Later, attempts were made per-vaginally to deliver the foetus (specify whether after correcting the default postures of foetus pervaginally?) by forced extraction resulted in the delivery of first live male foetus (Fig. 6). ~~P to delivered or withdrawal fetus with~~ proper lubrication of the birth canal using liquid paraffin and rinsing the perianal region with the 1 % potassium permanganate lotion was done during the procedure.; which ~~result into delivery of first live male fetus (Fig-6) and s~~ Subsequently, ~~the~~ two ~~another~~ live male foetuses of similar size were also delivered by grasping tiny fore limbs and manually applying forced extraction on the foetus in same manner.

Then the goat was post-medicated (Fig. -7) intramuscularly by administration of 3 ml-Chlorpheniramine maleate[®] (Antihistamines), 5 ml- Vitamin B-complex Injection, Melonex[®] (Meloxicam-Intas, India) @ 0.5 mg/kg. b.wt. IM OD and Quintas[®] (Enrofloxacin-Intas, India) @ 5 mg/kg. B.wt. IM OD; whereas 500 ml Dextrose normal saline was given intravenously along with placement of two Furea bolus (control the uterine infection- Allopathic remedies, India) in the uterus. ~~The~~ Liquid Exapar[®] (Indigenous herbal uterine cleanser and restorative-Natural Remedies, India) @ 20 ml twice PO and liquid Gluca-boost (To maintain the energy/glucose-Natural Remedies, India) @ 30ml twice PO was also advised. Intramuscular treatment using ~~A~~antibiotic, analgesic and antihistamine ~~intramuscularly treatment~~ was continued for 5 more days.



Fig 6: Delivered first male foetus (Anterior presentation with dorso-pubic



Fig 7: Doe was post-medicated

RESULTS AND DISCUSSION

Information of the patient was taken telephonically on every alternate day following discharge from hospital. The goat was found active and alert, resuming normal appetite within a six days post treatment and recovered uneventfully. In this present case successfully three live male foetuses (Fig. -8) were delivered successfully by correct position & and postures of foetus with manually applying mutational approach and forced extraction. In this clinical case, the foetal abnormal posture characterized by bilateral carpal and shoulder flexion, was the cause of dystocia where in both of the forelimbs were flexed at the knee joint region and shoulder joint. In ruminants, males foetuses are more frequently associated with dystocia as than female foetuses and male carries one day longer gestation? than the female one-counterpart (Arthur *et al.*, 1989). Which involved Earlier reports recorded dystocia which involved a male or a female live or dead foetuses respectively, with forelimbs carpal and shoulder flexion (Bhoi, *et al.*, 2010 and ...?). This is one of the most common cause of dystocia which can be and easily corrected dystocia (Majeed *et al.*, 1993). Majeed and Taha (1995) recorded There are a few obstetrical procedures that can be done to remove the foetus: (Majeed and Taha, 1995); these procedures include (1) mutation to correct abnormal presentation, position and posture of fetus by manipulation, (2) traction where application of outside force used to assist dam to expel fetus.; The other main reasons for not delivered dystocia of live fetus in the present case were as due to incomplete cervical dilatation, uterine inertia and foetal abnormal posture. In short, this case report described the successful management of foetal dystocia in a doe using pre-medicinal treatment combined with obstetrical mutational approach.



Fig 8: Delivered three live male foetuses from Doe

CONCLUSION

This case concluded that, by determining the factors rapidly, the occurrence of foetal dystocia can be managed by judicious diagnosis and timely interventions, which can save the lives of the dam as well as the foetus and prevent economic losses. In this case, the prognosis of the doe was good with further breeding.

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