

# Delivery of Malpositioned Fetus by Partial Fetotomy in a Primiparous Cow

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## ABSTRACT

Relieving dystocia in a cow by partial fetotomy and applying traction with long obstetrical hook.

**Keywords:** Fetotomy, Post-Traction, Dystocia, Malpresentation, Repulsion.

## I. INTRODUCTION

Deviations of head and neck are common type of abnormal posture in anterior presentations causing dystocia in all species (Roberts, 1971). The incidence of dystocia in cattle is high compared to equines (Morrow, 1986).

### Case History and Observation

A three year old cow in first parity with undersized body condition at calving with full term was presented to TVCC, College of Veterinary Science, Rajendranagar, Hyderabad from Goshala with history of onset of labour more than 24hours. The clinical case was handled by local paraveterinarian for 1-2hours after beginning of labour. By applying forced traction on forelimbs without observing the position of head and neck. After the complication of the case it is presented to TVCC.

On general examination, the cow appeared dull, depressed and in recumbent posture. Udder engorgement and relaxation of sacrosciatic ligament were prominent. Both forelimbs were protruded out from the vulva. Conjunctival mucous membranes were normal. Vulva was swollen and edematous.

Pervaginal examination revealed a dead fetus in anterior longitudinal presentation, dorso-sacral position with left lateral deviation of head and neck. The cervix was fully dilated and uterine cavity was dry and was devoid of

fetal fluids but there is a scope for fetal repulsion. The case was diagnosed as dystocia due to left lateral deviation of head and neck.

## II. METHODS AND MATERIAL

### TREATMENT

As the birth canal is dry with inflamed vagina, the vagina was lubricated with 1%carboxymethyl cellulose liquid. The lubricant was also infused into uterus with the help of catheter. Both the forelimbs were pulled out of the vulva and partial fetotomy was performed by cutting at the knee joint of both limbs by retaining the first row of carpal bones to radius and ulna ( Fig.1 ). After amputation, obstetrical chain was applied to both the limbs above the knee joint and were repelled into uterus to create the adequate space in the birth canal. Fetal head was located with help of obstetrician hand and obstetrical sharp eye hook was fixed into the long handle is passed into uterus and hook is fixed to the inner canthus of eye orbit and traction was applied. Slowly, the fetal head was brought into birth canal. Both limbs were extended into birth canal by applying slow traction with the help of obstetrical chain.

Once the two limbs and head was pulled upto the level of vulva, traction was applied on two limbs alternatively in downward and backward direction and simultaneously slight traction was applied on fetal head. Thus complete fetus was delivered by traction (fig .2).



### III. RESULT AND DISCUSSION

Supportive treatment was given to the cow after delivery of the dead foetus by administering Inj. Calcium borogluconate-450ml,I/V; Inj. Rintose -500ml,I/V; Anhistamin-10ml,I/M; Melonex-10ml,I/M and a course of antibiotic Inj.Intacef-2.5g was given I/M for 5 days. The Cow recovered eventually without postpartum complications.



**Figure 1:** Cutting at the knee joint of both limbs by retaining the first row of carpal bones to radius and ulna

Underdeveloped pelvis, deviated head and neck were contributing factors for occurrence of the dystocia. Application of the traction on fetal forelimb by the paraveterinarian without observing the fetal head position resulted into complication of the case further. Zaborski(2009) reported that cow body weight and condition, cow pelvic area, calf birth weight are the contributing factors for dystocia. Nix and Spitzer (1998) reported that dystocia was greater in primiparous (17%) than multiparous dams (4%). Higher number of dystocia cases were delivered with fetotomies in cows when compared to buffaloes (Purohit and Mehta, 2006).Peter Jackson (2004) reported percentage of bovine dystocia cases due to feto-pelvic disproportion is 45% and fetal malpresentation is 28% among the total dystocia conditions in dairy cattle.The case was delivered by fetotomy operation because fetotomy is best operation for dead fetus and dam requires less care after fetotomy than cesarean section. Fertility and milk production are likely to be higher after fetotomy than cesarean section. in backend it generate XML file so that later we can parse the equations and can evaluate.

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**Figure 2 :** Complete fetus was delivered by traction

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