

Per-Vaginal Correction and Management of Dystocia in a Crossbred cow

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Abstract

A cow was presented with completion of gestation and rupture of water bags normally. Per-vaginal examination revealed fully dilated cervix with presence of perineal parts such as buttocks, anus and tail of fetus. Further careful examination revealed dead fetus due to dystocia with bilateral hip flexion (breech presentation). Further obstetrical procedure was carried out under caudal epidural anesthesia, the abnormal posture of fetus was corrected per-vaginally by mutation techniques and dead fetus was delivered successfully with careful traction. Due care of dam was taken with supportive treatment to improve physical and physiological condition of dam.

Keywords: Breech presentation; dystocia; fetus; mutation technique

Introduction

Dystocia is more common in cattle than buffaloes. Fetomaternal disproportion is the commonest cause of dystocia in cattle *i.e.* incidence is 46 percent (Jackson *et al.*, 1985). Faulty disposition of fetus has also frequently been reported as a cause of dystocia (Noakes *et al.*, 2009). When both hind limbs are retained in uterus, a common condition than unilateral retention is called as breech presentation. Breech presentation constitutes one of the most difficult type of dystocia dealt by obstetrician. Usually on per-vaginal examination, calf's tail is recognized. Degree of engagement of fetus in maternal pelvis varies and in some cases the hand cannot be passed to hock of calf.

History and Clinical Examination

A three years old Primigravida Holstein Friesian crossbred cow with its full gestation weighing 350 kg was presented with history of straining since twelve hours, allanto-chorion was ruptured about 8-9 hours before and animal was handled by layman. Clinical examination revealed that cow was dull and depressed with all vital parameters within normal range. Per-vaginal examination revealed cervix fully dilated and perineal parts of fetus were jammed in the pelvic inlet; the buttocks, anus and

tail were easily palpable; the hind limbs were flexed under the belly of fetus. Further careful examination revealed a dead fetus as no anal reflexes were present. Accordingly, the case was diagnosed as dystocia due to breech presentation.

Treatment and Management

Prior to obstetrical procedure Inj. Dexamethasone at 0.04 mg/kg b.wt. I/M and Inj. Chlorpheniramine maleate – 15 ml I/M administered for purpose of stress management and then caudal epidural anesthesia was given with 10 ml of 2 percent Lignocaine HCl was instilled at sacrococcygeal space. Further 2 percent Carboxy-methyl-cellulose (CMC) sodium solution was administered I/U for lubrication of genital passage (Sharma *et al.*, 2014) and after thorough lubrication of genital passage fetus was repelled into uterus with help of Gunther's repeller and hands to create enough space in uterus for further manipulations. Hand corresponding to right hind limb was introduced and tibia was grasped from the lateral side near to hock. Gradual traction applied here, which lead to flexion of hock and stifle joints, which brought it into hock flexion *i.e.* hip flexion is converted into hock flexion. Further with help of application of calving ropes on the pastern of right hind leg, the hock is repelled upward and forward with the hand and simultaneously with the application of traction on calving ropes. These antagonistic forces helped to extend flexed hock joint. And the same procedure is repeated to extend flexed left

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Dystocia correction



Fig. 1: Correction of breech presentation



Fig. 2: Fetal expulsion after traction

hind limb. Then dead fetus was delivered successfully with careful traction and placenta was removed manually to prevent its retention (Fig.1 and 2).

Supportive treatment included Inj. Tranexamic Acid - 20 ml I/M; Bol. Ropitas^a - 4 tablets I/U; Inj. Flunixin Meglumine^a at 1.1 mg/ kg b.wt. I/M; Inj. Intalylte^a - 1000 ml I/V; Inj. Tonophosphan^b - 15ml I/V; Inj. Tribivet^a - 10ml I/V; Inj. Mifex^c at 1ml/kg b.wt. I/V. and advised Liq. Exapar^d - 500 ml (100 ml on first day OD PO followed by 50 ml BID PO from next day for 3 days); Inj. Flunixin Meglumine^a at 1.1 mg/kg b.wt. I/M for 3 days; Inj. Tribivet^a - 10 ml I/M for 2 days. The animal recovered uneventfully.

Discussion

In bovines, 95 percent of fetuses are believed to be delivered in anterior presentation (Noakes *et al.*, 2009). However, in posterior presentation the occurrence of bilateral hip flexion condition seen in ruminants and constitutes severe type of dystocia. The aim of treating was to correct breech presentation by converting it into hock flexion and

hock flexion into extended hind limbs with mutation techniques and delivery of calf with careful traction (Gaikwad *et al.*, 2018). In the present case, following a correct diagnosis, dystocia due to breech presentation was relieved which avoided economic loss to farmer, stress and post-operative complications of caesarean operation to dam. The procedure gave dam better chances of future fertility, which is questionable following caesarean section.

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