

*Short Communication*

**CLINICAL MANAGEMENT OF DYSTOCIA DUE TO EMPHYSEMATOUS FETUS  
IN A CROSSBRED JERSEY COW- A CASE REPORT**

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**ABSTRACT: A crossbred Jersey cow suffering with dystocia due to emphysematous fetus. Pervaginal delivery of the monster fetus was performed and ruptured uterus was treated by uterine eversion technique.**

**Key words:** Crossbred Jersey cow, Dystocia, Emphysematous fetus, Monster.

Dystocia is defined as delayed or difficult to calving, sometimes requiring significant human assistance (Lombard *et al.* 2007, Zaborski *et al.* 2009, Uzamy *et al.* 2010). In cattle and buffalo the incidence of dystocia is maximum compared to other farm animals (Purohit *et al.* 2011). Fetal emphysema is a frequent complication of parturition and a primary cause of dystocia in farm animals (Arthur *et al.* 2001). There is putrefaction characterized by formation of gases in the subcutaneous tissue within 24 -72 hours subsequent to the death of the fetus and the fetus becomes soft, decomposed and distended with gases (Sane *et al.* 1994). Srinivas *et al.* (2007) reported that 40.84 percent of dystocia in graded Murrah buffalo are due to fetal cause, among which head deviations were 42.22 percent. Amongst different reasons, the deviation of head and neck of fetus in anterior presentation are most common (Roberts 1971) and may be in any direction (Das *et al.* 2009).

The lateral deviation of head especially in a dead fetus becomes life threatening for the dam due to uterine contractions in inappropriately treated cases (Sane *et al.* 1994). The present communication describes a case of dystocia due to posterior presentation complicated by fetal emphysema in a crossbred Jersey cow.

**Case history and observation**

A crossbred jersey cow in its 2<sup>nd</sup> lactation was presented with a history of a prolonged second stage of labor with forceful abdominal contractions and two fetal hind limbs protruding from the vulva. This case already attended by the field Veterinarian but could not succeed and referred it to Teaching Veterinary Clinical Complex,

Namakkal. Animal was dull, depressed, anorexic and having temperature 39.5<sup>o</sup>C. Per-vaginal examination revealed protruding the both hind legs of the dead foul smelling emphysematous fetus with crepitating sound. Both hind legs were extended towards the birth canal. Foul smelling vaginal discharge was found. Further detailed examination confirmed the presence of an abnormal emphysematous fetus inside the uterus (Fig. 1).

**Treatment and Discussion**

The animal was restrained by using 2 % lignocaine hydrochloride solution epidural (4 ml) and animal placed hydraulic table in TVCC on lateral recumbency. Gas from emphysematous fetus was removed by incision on the right lateral caudal aspect of the fetus by William's long obstetrical hook. After that, lubricant was applied on the fetus and also reproductive organ of the dam. Snare applied on both hind legs and four men traction was applied for delivery of the fetus (38.5 kg weight).Tear noticed on left lateral aspect of the uterus after delivery. Uterus was everted (Fig. 2) by uterine eversion technique by Selvaraju *et al.* (2009). The uterine rupture (Fig. 3) was corrected by suturing the teared muscles (Fig. 4) by cushioning followed by lumbert suturing pattern with no. 2 catgut.

The cow was treated with an inj. Ceftriaxone and Tazobactam 10 mg/kg body weight I/M, Dextrose normal saline 4 lit I/V, Ringer's lactate 2 lit I/V, Meloxicam (0.5 mg/ kg b. wt), Oxytocin 40 IU I/M, Calcium 450 ml I/V, Bol. Nurea 4 nos I/UT and Chlorphenaramine maleate 10 ml I/M, oral uterine ecboic 450 ml bid/day,



**Fig. 1. Fetal monster.**



**Fig. 2. Showing serosa layer of uterus.**



**Fig 3. Teared tissue of uterus.**



**Fig. 4. Line of suture.**



**Fig. 5. After treatment.**

Inj. Metronidazole was given 20 mg/kg body weight in divided doses. The same treatment was given for 5 days continuously. The cow showed an uneventful recovery.

Fetal death may result in an increase in fetal size due to putrefaction of the fetus and accumulation of gases in the subcutaneous tissue in the following 24-72 hours. This is known as fetal emphysema (Purohit 2006). Fetal emphysema should always be suspected in prolonged cases of dystocia exceeding over 24 hours. After such prolonged cases, abdominal contractions are weak and intermittent for a few hours and then cease completely (Phogat *et al.* 1993). Invasion by microorganism from the vagina is the common cause of emphysema in dead fetus. Grossly over enlarged and emphysematous monstrosities are extremely difficult to relieve by fetotomy and hence caesarean section should be

performed (Purohit *et al.* 2012), but in this case successful by per vaginal delivery has been performed.

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