

# Repair of Uterine Rupture by Eversion Technique Following Schistosomus Reflexus Fetal Delivery in A Jersey Crossbred Cow

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## ABSTRACT

Dystocia due to Schistosomus reflexus fetus in a Jersey crossbred cow complicated with uterine rupture and its successful management by eversion technique is reported.

**Keywords :** Schistosomus reflexus fetus, Dystocia, Uterine rupture and Eversion technique.

## I. INTRODUCTION

Schistosomus reflexus is a rare congenital birth defect primarily seen in ruminants (Suthar *et al.*, 2011 and Bhattacharyya *et al.*, 2012). It is a major congenital anomaly which occurs during embryonic development. The etiology is unknown but it may be due to genetic factors, mutation, chromosomal anomalies, infectious agents and environmental factors or combination of all the factors (Noakes *et al.*, 2002). Fetotomy or caesarean section is mandatory for delivery of a Schistosomus reflexus while per-vaginal expulsion without any obstetrical assistance is noticed in small sized monster fetuses (Kalita *et al.*, 2004). Improper handling of this type of cases lead to uterine rupture and collapse of the affected animal. But, this present communication reports a case of dystocia due to schistosomus reflexus complicated with uterine rupture and its management by manual eversion technique in a Jersey crossbred cow.

## II. CASE HISTORY AND CLINICAL OBSERVATION

A Jersey Crossbred cow aged about 4 years on its second parity was brought to the Obstetrics unit of Teaching Veterinary Clinical Complex, Namakkal with the history of dystocia. The water bag ruptured on previous day afternoon but the animal was unable to deliver the fetus. The case was treated by a practicing

veterinarian but was not successful and referred. Owner brought the portion of internal organs of the fetus in a plastic bag while admitting the case (Fig. 2). Vaginal examination revealed edematous vulval lips, fetid vaginal discharge, and fully dilated cervix with a dorsally ruptured uterus near the cervix (Fig. 3). The fetus was in anterior presentation (P<sub>1</sub>), Dorso sacral position (P<sub>2</sub>) with Left lateral deviation of head and neck (P<sub>3</sub>). The abdominal fissure of the fetus was palpable. Then this was diagnosed as dystocia due to fetal monster (Schistosomus reflexus) (Fig. 1) and spinal inversion (Fig.5).

## III. TREATMENT AND DISCUSSION

Epidural anesthesia was given at sacro- coccygeal space (2% lignocaine, 5 ml). After placing the animal on the hind quarter elevator the deviated head of the fetus was corrected by mutation operation and a dead, male schistosomus monster fetus was delivered by traction (Fig.1). Following the delivery of the monster fetus the ruptured uterus was evereted manually (Fig.3), washed with 2% potassium permanganate solution and the rupture was sutured by continuous interlocking suture pattern using No.2 chromic catgut (Fig.4). Then uterus was replaced to its original position as per standard technique as described by Selvaraju, *et al.* (2009). Post operatively the animal was treated with Inj. Dextrose normal saline (2000 ml, I/V), Inj. calcium (450 ml, I/V).

Inj. ceftriaxone (4g, I/V), Inj. Meloxicam (0.5 mg/kg, I/M), Inj. Chlorpheniramine maleate (10 ml, I/M), Nurea bolus (4 No., I/U) and Inj. Oxytocin (40 IU, I/V). The antibiotic, anti-inflammatory and antihistamines therapy along with intravenous fluids were continued for 5 more days and the animal recovered.

In the present case, gross examination of the fetus revealed marked ventral curvature of the spine. The body and chest walls were stretched. Although the fetus had full growth, the skin, musculature and peritoneum over the viscera behind the sternum were absent. The diaphragm attachment was incomplete. The lung was small and liver was enlarged. The rumen distended with fluid. The fore limbs and hind limbs were ankylosed. Similar findings were reported by Honparkhe *et al.* (2009) and Prasad *et al.* (2012) in cattle. The exact cause of such type of dystocia is still unknown. It could have occurred due to the teratogenic predisposition. The possibility of genetic predisposition can not be ignored. The interplay of multiple genes is a frequent and most important genetic mechanism for the occurrence of such extensive anomalies as described by Jana and Ghosh (2001). The owner said the animal yield 10 liters of milk per day, confirmed by telephonic conformation.



Figure 1. and Figure 2.

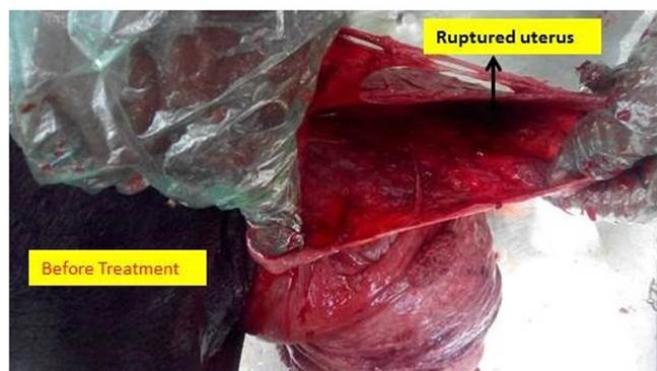


Figure 3.

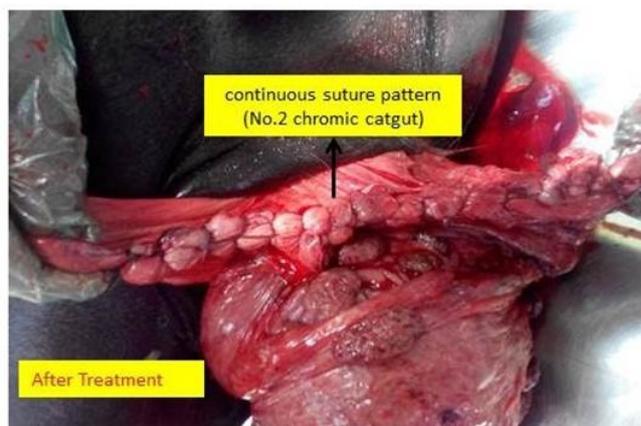


Figure 4.

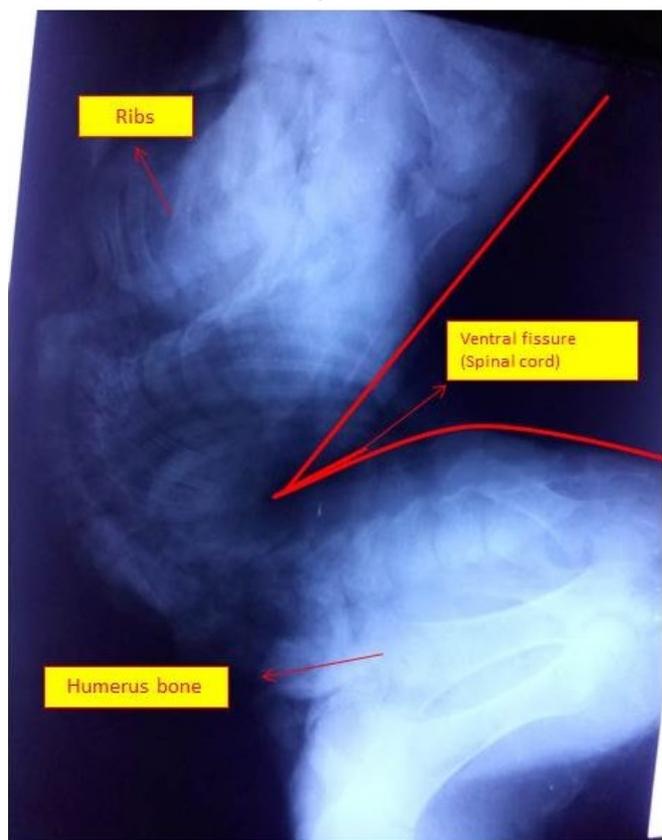


Figure 5.

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