



ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2023; 12(3): 5367-5368
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www.thepharmajournal.com

Received: 20-01-2023

Accepted: 26-02-2023

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Dystocia due to schistosomus reflexus fetus in a jersey crossbred cow

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Abstract

A Jersey crossbred cow was reported with the history of dystocia. On vaginal examination diagnosed as a case of dystocia due to schistosomus reflexus. A dead male schistosomus reflexus monster fetus was delivered by forced traction.

Keywords: Jersey crossbred cow, dystocia, schistosomus reflexus, forced traction

Introduction

Schistosomus reflexus is a rare congenital disorder characterized by a marked ventral curvature of the spine, deformed pelvis and the body and chest walls bent laterally with exposed thoracic and abdominal viscera (Roberts, 2071) [6]. It is usually encountered as an obstetrical problem in cattle. The incidence of schistosomus reflexus in cattle varies from 0.01% (Sloss and Johnston, 1967) [7] to 1.3 (Knight, 1996) [1]. The affected fetuses cause dystocia because of the characteristic angulation of the spine although the body weight may be less than the normal calf (Krishnakumar *et al.*, 2012) [2]. The present report records a case of dystocia due to schistosomus reflexus in a Jersey crossbred cow.

Case History and Observation

A full term pregnant Jersey crossbred cow on its second gestation was brought to the Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the history of straining started previous day evening 6.30 p.m. and water bag ruptured 5.00 a.m. in the morning but the cow has not delivered the fetus. During admission the cow was able to walk and was having severe and continuous straining. The general clinical examination of the cow recorded a body temperature of 38.4 °C, respiration rate of 28/minute, pale mucus membrane and mucus coated dung. The udder was edematous and udder secretion turned to colostrum. The vaginal examination revealed presence of two fetal limbs covered with fetal membrane at the level of vulval lips. Careful examination of the fetus revealed an anteriorly presented fetus with mild ankylosis of both the limbs. Based on the clinical examination the case was diagnosed as dystocia due to fetal anomaly.

Treatment and Discussion

Since the cow was having continuous straining 5 ml of 2% Lignocaine was given epidurally. The birth passage was lubricated with cetrimide cream. The fetal membrane over the limbs was torn, obstetrical snare was applied over the limbs and long obstetrical hook was applied on the inner canthus of fetus. By traction a dead male schistosomus reflexus fetus was delivered. Clinically the cow was treated with inj. Ceftriaxone (6.0 gm, i/m), inj. Meloxicam (150 mg, i/v), inj. Chlorpheniramine maleate (100 mg, i/m), inj. Oxytocin (30 IU, i/v), inj. Calcium borogluconate (450 ml, i/v) and inj. 25% Dextrose (1 liter, i/v). The animal was discharged on the same day.

Gross examination the fetus demonstrated ankylosed fetal limbs with distinct curvature of the vertebral column. The curvature of the vertebral column was characteristic and head was resting over the sacrum. The thoracic and abdominal cavities were open and organs like stomach, intestine, omentum, kidney, liver and spleen were exposed. The organs were normal in shape and size. The head, eyes, nose, fore and hind limbs were fully developed (Figure 2). Schistosomus reflexus is an embryonic genetic defect and might be due to inheritance of autosomal recessive gene with incomplete penetrance (Laughton *et al.*, 2005) [3].

The calf may be carried to term but fails to deliver normally. The ankylosed fetal limbs creates excessive fetal diameter thereby prevents the normal delivery of the fetus. In a retrospective study, Knight (1996)^[1] reported that among 90 cases of schistosomus reflexus attended over a period of 20 years, 56.7% were treated by embryotomy, 25.6% by caesarean section, 3.3% by simple traction. Treatment of the remaining 14.4% of cases was not completed and was considered hopeless, mainly because of the emphysematous condition of the foetus and the toxic condition of the cow, which gave a poor prognosis. The malformed fetus could be delivered by mutation and forced traction with liberal lubrication, if the fetal size is small (Manokaran *et al.*, 2012)^[2]. If failed, must be removed either by fetotomy or cesarean section (Newman, 2008)^[5].



Fig 1: Animal during admission



Fig 2: Schistosomus reflexus fetus delivered

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