

SUCCESSFUL PERVAGINAL MANAGEMENT OF *Schistosoma reflexus* IN BUFFALO:
A CASE REPORT

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ABSTRACT

The present case reports the successful per-vaginal delivery of *Schistosoma reflexus* fetus using Thygeson's fetotome. A nine-year-old Murrah buffalo of the sixth parity with an extended gestation period (11 months) was presented to the TVCC Mathura with a history of birth difficulties. The case was previously examined by a local veterinarian and tearing of the uterus, rectum and bowel was observed by him. The animal has been treated with antimicrobial, anti-inflammatory, antihistamines, multivitamins, and intrauterine therapy is using a tetracycline bolus. The animal is uneventfully recovered after 3 days of treatment.

Keywords: *Bubalus bubalis*, buffaloes, dystocia, fetus, fetotomy, *Schistosoma reflexus*

INTRODUCTION

Schistosoma reflexus is a developmental defect characterized by a pronounced ventral curvature of the spine, a deformed pelvis, and

laterally curved body and chest walls with exposed chest and abdominal organs (Roberts, 2004). *Schistosomus reflexus* is a rare species of fetal monster that occurs primarily in cattle and rarely in small ruminants, particularly ewes (Dennis *et al.*, 1965). A fetotomy or a caesarean section is mandatory for the birth of a full-grown *Schistosomus reflexus* monster, while a per-vaginal expulsion without obstetric assistance is observed in small monster fetuses (Kalita *et al.*, 2004). This congenital fetal syndrome is mainly characterized by the presence of exposed abdominal and sometimes thoracic viscera (*Schistosomus*) and an acute angular position of the spine (*reflexus*) so that the tail is close to the head (Roberts, 1986). It is a major congenital abnormality that occurs during embryonic development. The etiology is unknown but can be due to genetic factors, mutations, chromosomal abnormalities, infectious agents and environmental factors, or a combination of all factors (Noakes *et al.*, 2002). This paper reports on the successful management of the *Schistosoma reflexus* monster in Murrah buffalo.

CASE HISTORY AND CLINICAL OBSERVATION

A nine-year-old Murrah buffalo of the sixth parity with an extended gestation period (11 months) was presented to the TVCC Mathura with a history of birth difficulties. The case was previously examined by a local veterinarian and tearing of the uterus, rectum and bowel was observed by him. According to the owner, about 10 liters of water were initially used after ten months, at which time the animal was treated by a local veterinarian and the animal was recovered. One month later, after completing the 11-month gestation period, around twelve liters of water were noticed again at midnight. The milk loss occurred in the udder and the viscera were observed in the cervical region, which was misdiagnosed as cervicovaginal prolapse by the local veterinarian. The case was referred to the TVCC Mathura because of difficulties in processing. The animal's previous birth was normal, and the animal was active and alert with normal food and water consumption. In the per vaginal examination at TVCC Mathura, the viscera from the cervical region were assumed to be fetal viscera. On another thorough examination, the fetal fore and hind legs, head and tail were also palpable, but all limbs, head and tail were very closed, confirming the diagnosis that it was a schistosomal flexus.

TREATMENT AND DISCUSSION

In this case of *Schistosoma reflexus* monster, normal vaginal delivery was not possible. Therefore, it was decided to do a fetotomy with Thygeson's fetotome. Fetotomy was partially threaded. A foreleg (removed first), a hind leg, and

the neck (later) were removed by partial fetotomy. Then traction was performed on another hind leg and finally the fetus was pulled out with the head removed. All four limbs are ankylosed. On anatomical observations, the uterus was normal and after rechecking it was not torn. Placenta is also expelled within half an hour and later. The animal has been treated with antimicrobial, anti-inflammatory, antihistamines, multivitamins, and intrauterine therapy is using a tetracycline bolus. Calcium magnesium borogluconate (450 ml) was administered to the animal. The animal is active and alert after the birth of the monster fetus. The animal is uneventfully recovered after 3 days of treatment. A fetal monster with herniation of abdominal organs and skeletal defects is called a *Schistosoma reflexus* (Dennis *et al.*, 1965). This type of monstrosity can be corrected by either obstetric mutation, fetotomy, or caesarean section. It is most common in cattle and buffalo (Srivastava *et al.*, 1998). An incidence of 0.01 to 1.3% of bovine dystocia has been reported (Sloss *et al.*, 1967). A partial fetotomy of the fetal parts is suggested (Singh *et al.*, 2018) when the spinal curvature is acute, preventing the fetus from passing through the birth canal. In the present work, the fetus was delivered by dividing the monster fetus into different parts with the help of the Thygeson's fetotome.

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Figure 1. Fetal viscera are exposed to ground.



Figure 2. *Schistosomus reflexus* in buffalo.

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