

DELIVERY OF A *SCHISTOSOMUS REFLEXUS* MONSTER THROUGH CAESAREAN SECTION IN A MURRAH BUFFALO

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ABSTRACT

A case of dystocia in a Murrah buffalo due to *Schistosomus reflexus* monster is reported and discussed here.

Keywords: *Bubalus bubalis*, buffalo, *Schistosomus reflexus*, Murrah buffalo

INTRODUCTION

Schistosomus reflexus is a rare and fatal congenital disorder. Primarily observed in ruminants, its defining features include spinal inversion, exposure of the abdominal viscera because of a fissure of the ventral abdominal wall, limb ankylosis, positioning of the limbs adjacent to the skull and, lung and diaphragm hypoplasia (Laughton *et al.*, 2005). The condition belongs to the family of defects involving incomplete closure of the ventral body wall. The 'schistosomus' aspect of the syndrome i.e. the presence of a congenital schistocoelia is manifested in many species (Bishnoi *et al.*, 1987; Pivnick *et al.*, 1998). Conversely, the 'reflexus' component of the disorder is limited to only a few species. In fact, it has been suggested by Bezek and Frazer (1994) that this anomaly is restricted to ruminants. The 'reflexus' component alone has been described using such varying

terminology as dorsiflexion, dorsal flexion, retroflexion and inversion (Laughton *et al.*, 2005). The prevalence of *Schistosomus reflexus* is believed to occur in cattle from as low as 0.01% (Sloss and Johnston, 1967) to a high of 1.3 (Knight, 1996). Such occurrences are costly to the cattle and buffalo owners because of the reduction in number of viable offspring's, loss of milk production and cost of fetal extraction or caesarean section. This monstrosity has been reported in cattle (Jana and Ghosh, 2001) and water buffalo (Murthy *et al.*, 1991; Singla and Sharma, 1992). The present case reports a rare occurrence of *Schistosomus reflexus* in a Murrah buffalo.

CASE HISTORY AND OBSERVATIONS

A case of dystocia (Registration No. E-71160 dated 29.07.2016) in a pleuriparous Murrah buffalo was presented to Teaching Veterinary Clinical Complex, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar (Haryana) with the history of straining and hanging of fetal stomach filled with mucoid fluid and loops of intestines through the dam's vulva (Figure 1) and no progression in parturition for last 9 h. The owner of the animal was cross checked for any mishandling by the veterinary practitioners at



Figure 1. Hanging of fetal stomach filled with mucoid fluid and loop of intestines of a *Schistosomus reflexus* monster.



Figure 2. *Schistosomus reflexus* monster delivered through caesarean section.

door step and it revealed that paraveterinary staff referred the animal as a case of rupture of maternal uterus leading to prolapse of intestines. Following epidural anesthesia and sufficient lubrication, animal was examined per vaginally. Per-vaginal examination revealed that the birth passage was completely relaxed, fetal reflexes were absent and the fetus was confirmed as dead. Fetal thoracic and abdominal contents were present in the birth canal. No remnants of fetal ventral body wall were apparent. The case was diagnosed as dystocia due to *Schistosomus reflexus*.

TREATMENT AND DISCUSSION

Epidural anaesthesia with 2% lignocaine was given to the dam, followed by evisceration of protruding fetal contents and forced traction was applied. But could not succeed due to deformed fetal pelvis. The owner was advised for caesarean section. The caesarean section was performed as per routine surgical method (paramedian, lateral to milk vein) and a *Schistosomus reflexus* monster was delivered (Figure 2). On the basis of external genitalia, sex of monster was female. The dam was administered systemic broad spectrum antibiotics (Ceftriaxone plus Sulbactam), anti-inflammatory drugs (Flunixin meglumine), herbal ecbolics, calcium boro-gluconate, normal saline, metronidazole and multivitamins. The treatment was recommended further for seven days.

Fetal pelvis was deformed and the deformation of the pelvis is a variable skeletal anomaly that results from the spinal inversion and compression between the inverted spine and the caudal bones of the skull (Bugalia *et al.*, 1982; Roberts, 1971). The lungs of fetus were hypoplastic which also have been reported in other cases

(Dennis and Meyer, 1965; Fatimah *et al.*, 1981). [Hepatomegaly was observed and similar case was also reported by Laughton *et al.* (2005). Fore and hind limbs were ankylosed and it was difficult to straighten them. Cervical intervertebral joints were in ankylosed state. A more or less similar characteristic monstrosity in crossbred cattle (Jana and Ghosh, 2001; Singh *et al.*, 2010) and buffalo (Chandraprasad *et al.*, 2010) was observed when dystocia was relieved by caesarean section.

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