Dystocia Due to *Schistosoma reflexus* in a Hariana Cow

Akhil Patel*, Sanjay S. Yadav, Dushyant Yadav, Vipin Sonker and Atul Saxena

Department of Veterinary Gynaecology & Obstetrics, College of Veterinary Science and Animal Husbandry, U.P.Pandit Deen Dayal Upadhyay Pashu Chikitsa Vigyan Vishwavidyalaya Evam Go Anusandhan Sansthan, Mathura-281001 INDIA

*Corresponding author: dr.akhil.patel87@gmail.com*

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**Abstract**

This communication reports a case of *Schistosoma reflexus* in a pluriparus Hariana cow

**Key words:** Hariana cow, *Schistosomus reflexus*, Dystocia, Caesarean section, Monstrosity

**Introduction**

*Schistosoma reflexus* is a rare type fetal monstrosity primarily seen in cattle and occasionally in sheep, goat and in other species (Roberts, 1971). This fetal congenital syndrome is mainly characterized by presence of exposed abdominal and sometimes thoracic viscera (*Schistosomus*) and acute angulation of vertebral column (*reflexus*) such that tail lies close to the head (Roberts, 1986). It is a major congenital anomaly which occurs during embryonic development. The aetiology 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 foetuses (Kalita *et al.*, 2004).

**Case History and Clinical Observations**

A pluriparous full term exhausted Hariana cow in its 4th parity brought to Teaching Veterinary Clinical Complex, DUVASU, Mathura, with history of straining since last 6 hours with no progression in parturition. Fetal intestine was hanging through the vulva of the dam (Figure 1). Per vaginal examination revealed fully dilated cervix, ventral curvature of vertebral column and the head, both hind limbs and tail were in birth canal. The exposed visceral organs were palpable through incompletely closed ventral body wall. Thus it was diagnosed as a case of *Schistosoma reflexus* (Figure 2).
Treatment and Discussion

Due to less space to engage fetotome wire, fetotomy could not possible so it was decided to perform caesarean section. Under local and high caudal epidural anaesthesia, caesarean-section was performed on the left ventro-lateral site adopting the standard operating procedure and the dead *Schistosoma reflexus* fetus extracted out. Following routine post-operative cares animal recovered uneventfully.

Foetal monster with herniation of abdominal viscera and skeletal defects is referred to as *Schistosomus reflexus* (Dennis and Mayer, 1965). This monstrosity is common in cattle and buffaloes (Srivastava *et al*., 1998) and can be corrected either by obstetrical mutation, fetotomy or caesarean section. The highest prevalence of *Schistosomus reflexus* is believed to occur in cattle (Roberts, 1986). The incidence ranging from 0.01% (Sloss and Johnston, 1967) to 1.3% (Knight, 1996) of bovine dystocias have been reported. Literature consulted suggests delivery of *Schistosoma reflexus* through obstetrical mutation (Selvaraju *et al*., 2013) as well as through caesarean section (Azawi *et al*., 2012).

Summary

This paper reports about a surgical approach for relieving dystocia due to *Schistosoma reflexus* in a Hariana cow.

References