

CASE REPORT

Schistosoma Reflexus in Non-Descriptive Doe: A Rare Case Report

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Ind J Vet Sci and Biotech (2022): 10.21887/ijvsbt.18.3.36

Schistosoma reflexus is commonly observed in ruminants, characterized by spinal inversion, evisceration of abdominal viscera, lung hypoplasia, positioning of the limbs adjacent to the skull, and an abnormal shape of the liver and rumen when distended with fluid. It has been observed most commonly in cattle (Roberts, 1998), buffaloes, occasionally in horses, rarely in goats (Hashemnia *et al.*, 2013; Kumar *et al.*, 2016), sheep, camels, and swine (Irwin and Pulley, 1996). This type of congenital anomaly occurs during the embryonic stage of the fetus. The etiology of congenital anomalies is unknown, but it may be due to genetic factors such as mutations, chromosomal anomalies, infectious agents, and environmental factors (Noakes *et al.*, 2009). In this case study, dystocia due to a dead male Schistosoma reflexus fetal monster was relieved successfully by manual traction.

CASE HISTORY AND OBSERVATIONS

A full-term pregnant primiparous doe was presented with a history of straining and inability to undergo the normal process of kidding. Clinical examination revealed heart rate and respiratory rate were within the normal range but elevated rectal temperature (39.8°C). Per vaginal examination revealed eviscerated intestinal loops protruding toward the vagina and a fetal head was palpated in the cervix. Thus, the case was diagnosed as dystocia due to schistosoma reflexus monster.

TREATMENT AND DISCUSSION

The doe was restrained in a standing position, followed by epidural anesthesia of 2% inj. Lignocaine @ 2 mL given in the sacro-coccygeal joint. The genital tract was lubricated with mineral oil. The fetus was delivered per vaginam by forced traction with the hand on the eviscerated intestinal loops followed by the head. A dead fetus was successfully removed. The fetus weighed approximately 1 kg with a normal gross appearance of the head; fore limbs with acute angulations of the vertebral column such that hind quarter lied close to the head and other parts of the body were absent. The abdominal parts were not developed properly, eviscerated outside, and covered with a thin membrane (Fig.1). The animal was treated with Inj. Ceftriaxone sodium @ 10 mg/kg body

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How to cite this article: Shanmuganathan, S., Manikandan, R., Praveen, V. (2022). Schistosoma Reflexus in Non-Descriptive Doe: A Rare Case Report. *Ind J Vet Sci and Biotech*. 18(3), 143-144.

Source of support: Nil

Conflict of interest: None.

Submitted: 11/09/2021 **Accepted:** 20/01/2022 **Published:** 10/07/2022

weight, Inj. Meloxicam @ 0.5 mg/Kg body weight, and Inj. Chlorpheniramine maleate @ 1-mL intramuscular for 3 days.

Schistosoma reflexus are a common fatal disorder primarily observed in ruminants (Roberts, 1998). Fetus monster with abdominal viscera herniation and skeletal defects is referred to as Schistoma reflexus. The confirmative etiology is unclear. However, it is a heritable genetic defect



Fig. 1: Schistosoma reflexus foetal monster with eviscerated abdomen.

and various reports have suggested that Schistosomus reflexus occurs mainly due to transfer of autosomal recessive gene having incomplete penetrance to developing embryo (Laughton *et al.*, 2005). Dystocia due to Schistosoma reflexus was successfully managed per vaginally in a goat (Suthar *et al.*, 2011) and in a cow (Sheetal *et al.*, 2018). This type of dystocia can be corrected by obstetrical mutation (Nain *et al.*, 2019), fetotomy, or caesarean section (Noakes *et al.*, 2009). Although the Schistosomus reflexus monster is rare case in goats, similar cases have been reported (Kalita *et al.*, 2004; Suthar *et al.*, 2011). This report describes the successful management of dystocia due to Schistosoma reflexus fetal monster by manual traction in a goat.

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IX Annual Convention and National Seminar of SVSBT

The **IX Annual Convention** and **National Seminar** of The Society for Veterinary Science & Biotechnology (**SVSBT**) on **“Recent Biotechnological Advances in Health and Management to Augment Productivity of Livestock and Poultry”** will be **organized at Ramayanpatti, Tirunelveli - 627 358, Tamil Nadu, during September 22-24, 2022** (Thursday, Friday & Saturday) by Veterinary College & Research Institute, Tirunelveli - 627 358, TANUVAS, (TN). The detailed Brochure cum Invitation showing Theme Areas/ Sessions, Registration Fee, Bank Details for online payment and deadlines, etc. has been floated on the Whats Apps and e-mails. Accordingly, the organizing committee of **SVSBT NS-2022 invites abstracts** of original and quality research work on theme areas of seminar limited to 250 words by e-mail on svsbtttns2022@gmail.com or mopandian69@gmail.com latest by 30th August, 2022 for inclusion in the Souvenir cum Compendium to be published on the occasion.

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