

## Management of Dystocia due to *Schistosoma reflexus* in a Cross-Bred Cow

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### Case Report

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### Abstract

*Schistosoma reflexus* is a rare type of foetal monster which causes dystocia in cow. It was managed by caesarean-section to save the life of the dam and the cow recovered uneventfully following post operative therapy.

**Keywords:** Caesarean-Section; Cow; Dystocia; *Schistosoma reflexus*

### Introduction

*Schistosoma reflexus* is a rare type fetal monstrosity primarily seen in cattle and occasionally in sheep, goat and in other species [1]. It inevitably causes dystocia because of the monstrous changes in the shape of the foetus. The spine is inverted, so the head and tail are in close proximity (the flexus part of the condition). The schistosomus part of the syndrome describes the failure of the closure of all or part of the ventral wall of the calf's body: the internal organs are not contained by an abdominal or thoracic wall. 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 [2]. This congenital anomaly generally occurs during embryonic development of the foetus. The exact aetiology of this anomaly is unknown but it may be due to genetic factors, mutation, chromosomal anomalies, infectious agents and environmental factors or combination of all the factors)

[3]. Unless fetotomy or a caesarean section is performed, the cow usually dies.

### Case History and Clinical Observations

A pluriparus full term exhausted crossbred cow aged about 7 years, in its 3th parity brought to the Teaching Veterinary Clinical Complex, Nagpur Veterinary College, Nagpur, Maharashtra, India, with history of straining since last 8 hours. Three limbs of the foetus were projecting outside the vulva but traction on the projected limbs did not help to deliver the foetus by the local veterinarians. Per vaginal examination revealed fully dilated cervix, ventral curvature of vertebral column and the head, both hind limbs and one of the fore limb and tail were in birth canal. In addition, foetal intestine was felt by hand on per-vaginal examination and also the exposed visceral organs were palpable through incompletely closed ventral body wall. Thus the case was diagnosed as dystocia due to *Schistosoma reflexus* (Figure 1).



**Figure 1:** *Schistosoma reflexus* foetus removed by Caesarean-section.

### Treatment and Discussion

The case was pre-treated, and less space was available to perform foetotomy, so it was decided to perform caesarean section to manage dystocia and save life of dam. Local infiltration (inverted L field block) of anaesthetic (2% Lignocaine hydrochloride) in left flank region was used. An 18 cm long oblique incision was given in left flank region. Then uterus was explored and incision was given at gravid horn over greater curvature saving caruncles. A dead male *Schistosoma reflexus* foetus was removed by applying traction. Following routine post-operative cares dam recovered uneventfully.

Foetal monster with herniation of abdominal viscera and skeletal defects is referred to as *Schistosoma reflexus* [4]. This type of monstrosity can be corrected either by obstetrical mutation, fetotomy or caesarean section. It is most common in cattle and buffaloes [5]. The incidence ranging from 0.01% to 1.3% of bovine dystocias have been reported [6,7]. A successful handling of dystocia due to *Schistosoma reflexus* by partial foetotomy in a cow is reported by Selvaraju, et al. (2013) [8] and through caesarean section by Azawi, et al. [9].

### Summary

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

### References

1. Roberts SJ (1971) Veterinary obstetrics and genital diseases. 2<sup>nd</sup> (Edn.), C.B.S. Publisher and Distributer, Delhi, pp: 70-73.
2. Roberts SJ (1986) Veterinary obstetrics and genital diseases, 3<sup>rd</sup> (Edn.), Woodstock: Roberts
3. Noakes DE, Parkinson TJ, England GCW, Arthur GH (2002) Arthur's veterinary reproduction and obstetrics. 8<sup>th</sup> (Edn.), Elsevier Sci Ltd., pp: 129-212.
4. Dennis SM, Mayer EP (1965) *Schistosoma reflexus* in a sheep. Vet Rec 77(47): 1386-1387.
5. Srivastava KK, Sharma AK, Ahlawat SPS, Maithy SK (1998) *Schistosoma reflexus perosomus elumbis* in Holstein Friesian cow. Indian J Anim Reprod 19(1): 75.
6. Sloss VE, Johnston DE (1967) The cause and treatment of dystocia in beef cattle in western Victoria. Aust Vet J 43(1): 13-21.
7. Knight RP (1996) The occurrence of *Schistosoma reflexus* in bovine dystocia. Aust Vet J 73(3): 105-107.
8. Selvaraju M, Kumaresan A, Ravikumar K, Sivaraman A, Manokaran S, et al. (2013) *Schistosoma reflexus* fetus in a cow-a case report. Shanlax International Journal of Veterinary Science 1(1): 28-29.
9. Azawi OI, Ahmed OS, Abass SF (2012) *Schistosoma reflexus* foetus in cross breed Iraqi cow: A case report. Iraqi Journal of Veterinary Science 26(2): 103-104.

