

Life Threatening Worm Burden due to *Toxocara vitulorum*: Two Case Reports

Koduru Rajesh^{1,*}, Thangamani A.², Laimi Elizabeth S.², Maduri Dommeti²

¹Teaching Veterinary Clinical Complex, NTR College of Veterinary Science, Gannavaram, Andhra Pradesh, India

M.V.Sc Scholar (Veterinary Gynaecology, Veterinary Medicine, Veterinary Parasitology), NTR College of Veterinary Science, Gannavaram, Andhra Pradesh, India

Abstract

A 2 month old graded murrah buffalo calf had bloat and lateral recumbency. Dung sample revealed illness due to *T. vitulorum*. Toxocariosis was dangerous if left untreated. Trocharization of rumen gives better result when compared to oral anti-bloat agent in severe bloat condition. Fecal sample examination was the simple tool to address the worm burden condition in field level.

Keywords: Buffalo calves, *T. vitulorum*, bloat, life threatening

*Author for Correspondence E-mail: koduru2007@gmail.com

INTRODUCTION

Toxocara vitulorum is a roundworm belonging to the family *Toxocaridae* [1]. Prevalence of *T. vitulorum* is strongly related to climatic conditions. Mostly, this type of roundworm causes intestinal obstruction, diarrhoea, weakness, dried hair, and bloat. If not treated early, animal goes for lateral recumbency. The present cases recorded life threatening recurrent bloat due to partial obstruction of intestine by *Toxocara vitulorum*.

Toxocara vitulorum mostly targeted on new born buffalo calf due to association between either placental or colostrum transmission. Regular deworming in farm rearing condition may alleviate the worm burden condition. Appreciation of fecal sample with more number of egg in single field of microscope suggestive of severe worm burden condition. Immediate remedies should be advocated for this type of condition.

CASE HISTORY AND OBSERVATION

About 2 months old two buffalo calves were born 2 months back in a farmer house. Both calves were presented in lateral recumbency. General clinical examination revealed temperature 96.5°F, heart rate 68 bpm, respiratory rate 22/min, CRT more than 2 sec, dry leathery skin and hair was observed. Blood sample and fecal sample were collected for diagnosis of blood protozoan and worm burden respectively. Blood sample shows

negative for blood protozoans. Fecal sample revealed presence of double walled *T. vitulorum* eggs (Figure 1), diagnosed as cause of life threatening level of this condition due to *T. vitulorum*.

TREATMENT AND DISCUSSION

Both calves were stabilized with DNS (500 ml, I/V) and RL (250 ml, I/V). Bloat was removed by trocharization of rumen with 16 gauge needle. One calf died during treatment. The calf was orally drenched with Pyrantel compounds (250 mg-Total dose/calf) followed by Ivermectin (0.2 mg/kg) administered sub-cutaneous. After fluid therapy and trocharization of rumen, the calf responded. Finally, enema was done with lukewarm water (20 ml) and liquid paraffin (20 ml), followed by orally drenched with liquid paraffin about 50–60 ml. After 2 days of treatment, calf recovered uneventfully without any complication. The owner was advised to give deworm for all animals in the shed.

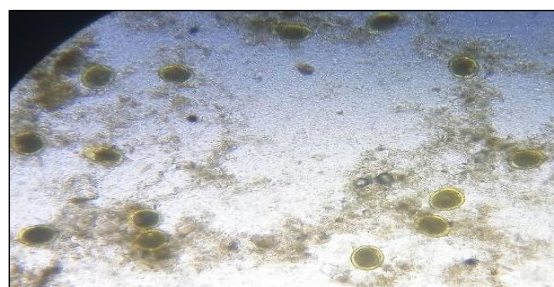


Fig. 1: Double Walled Egg (*T. vitulorum*).

T. vitulorum infection is spread from environment by dam and it is transmitted to the young ones through milk and prenatally through uterus [2]. *T. vitulorum* causes intestinal obstruction which may lead to life threatening bloat (or) intussusception. A simple diagnostic modality utilized for identification of the condition was fecal sample examination. Once in every 2 months, fecal sample examination in the farm may relieve the herd from worm burden condition. Intestinal larvae of the *T. vitulorum* are most susceptible to levamisole or pyrantel [3]. Author opined that for relieving bloat may use trocharization (or) stomach tube intubation in the field level instead of anti-bloat medicaments drenching.

CONCLUSION

T. vitulorum culminate to intestinal obstruction, intus-susception. For 15 days calves, first dose of Piperazine is important. Author is practicing deworming of calves at 15 days 1st dose, 30th day-2nd dose, followed by 3 month once.

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