International Journal of Veterinary Sciences and Animal Husbandry

ISSN: 2456-2912
VET 2023; 8(6): 85-86

www.veterinarypaper.com
Received: 21-08-2023
Accepted: 29-09-2023

Dr. Arja Avinash
M.V.Sc. Scholar, Department of Veterinary Surgery, College of Veterinary Science, Khanapara, AAU, Jorhat, Assam, India

Dr. Udaya Sai Sitaram Tella
M.V.Sc. Scholar, Department of Veterinary Pathology, College of Veterinary Science, Khanapara, AAU, Jorhat, Assam, India

Dr. Suresh Kumar
Veterinary Assistant Surgeon, Department of Animal Husbandary Andhra Pradesh, Anakapalle, Andhra Pradesh, India

Dr. Jodumoni kachari
Assistant Professor &, Department of Veterinary Surgery, College of Veterinary Science, Khanapara, AAU, Jorhat, Assam, India

Dr. Rangisetti Naga Prudhvi Teja
M.D. Scholar, Department of Allied Health Sciences, College of Ramiah University, Bangalore, Karnataka, India

Kumari Kameswari Abhilasha
B.V.Sc. Student, Department of Veterinary Surgery, College of Veterinary Science, Khanapara, AAU, Jorhat, Assam, India

Corresponding Author:
Dr. Arja Avinash
M.V.Sc. Scholar, Department of Veterinary Surgery, College of Veterinary Science, Khanapara, AAU, Jorhat, Assam, India

A case report on surgical management of eye worm in horse under field condition

Dr. Arja Avinash, Dr. Udaya Sai Sitaram Tella, Dr. Suresh Kumar, Dr. Jodumoni Kachari, Dr. Rangisetti Naga Prudhvi Teja and Kumari Kameswari Abhilasha

Abstract
This case report explores a rare, emerging and commonly neglected parasitic infection of Thelaziasis also known as eye worm, caused by nematodes of the genus Thelazia. The study presents a detailed analysis of a unique clinical case involving a horse of eight years old male of body weight 330 kg presenting with ocular thelaziasis. The report discusses the clinical manifestation, diagnosis and surgical treatment modalities employed in managing this unusual parasitic infection. The report aims to enhance awareness among healthcare providers, facilitating timely recognition and appropriate management of cutaneous thelaziasis.

Keywords: Thelazia lacrymalis, Thelaziosis, eye worm

Introduction
The horse, a creature of grace and strength, has been an inseparable companion to humans throughout history. From the thundering hooves of wild herds to the refined elegance of domesticated breeds horses embody a timeless connection between nature and humanity. Their loyalty, intelligence, and versality make them not just animals but steadfast partners in our journey through time. Many infectious agents, including bacteria, parasites, fungi, and viruses, have been implicated in the diseases that affect horses because they considered as one of the most common, serious and painful type (Alsaad *et al*., 2012) [1]. One of the crucial parasitic nematodes effecting horse belonging to the genus Thelazia (Spirurida, Thelaziidae) commonly known as eyeworms live in the conjunctival sac, lacrimal glands, and nasolacrimal ducts, or beneath the nictitating membrane of a broad range of vertebrates, including ruminants, equines, humans, birds, and domestic and wild carnivores (Deka *et al.*, 2021) [7]. The disease is poorly understood in horses, and not much is known about its epidemiology. The only species known to exist in horses is Telazia lacrymalis, which was initially documented in Germany during the 1800s (Cotuțiu *et al.*, 2022) [5]. The species is widely distributed, with populations found in Asia, the Americas, and Europe areas. This parasitic outbreak usually is associated with the warm season activities of the flies. The present paper describes the surgical removal of the worm in infected eye.

Case History and Clinical Observation
A mare from riding school of age eight years old male weighing about 330kg was presented with history of continuous discharge from left eye and cloudy appearance of the infected eye. The owner reported that animal is trying to rub the eye with surrounding wall and no deworming since a year. Appetite is decreased in the last 4 days, body temperature, pulse, and respiration rate are normal. On clear clinical examination of the eye showed a worm moving in the cornea. (Fig.1).

Treatment and Discussion
Restraining and anaesthesia
The animal was restrained properly and procedure was performed with Xylazine @ 1.1 mg/kg

body weight sedated standing horse along with supraorbital and auriculopalpebral. Horse is offed for overnight. Corneal desensitization was achieved by using topical Lignocaine-2% spilling.

Surgical procedure

After trimming of eye lashes of affected side, antiseptic solution was applied around the eye, eye lids were retracted (Fig-2). Removal of worm was done by a clear corneal stab incision with BP blade No. 11 between 6 'O'clock positions. In this technique, the worm was flushed out along with the outflow of the aqueous humour and the incision was left as such. Collected worms were washed and observed. Postoperative management consisted of Hatmox eye drops for 3times in a day, flushing of eye with normal saline, systemic antibiotic injection Axone forte@ 10mg/kg body weight along with NSAID flunixin megludyne @1.1 mg/kg body weight intra venously given for 3 days. Deworming with Fenbendazole given after 7 days of surgery to prevent from larva.

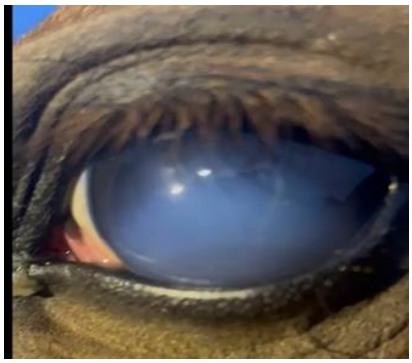

Fig 1: Eye Worm in left eye (Whitish Part on the cornea).

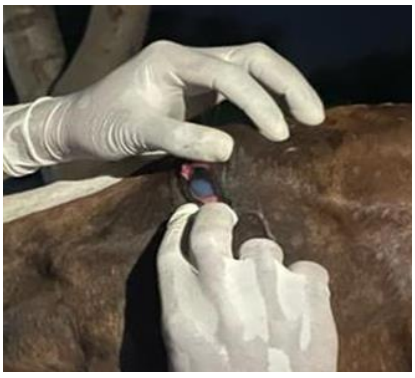

Fig 2: Seperation of the eye lids to give stab incision.

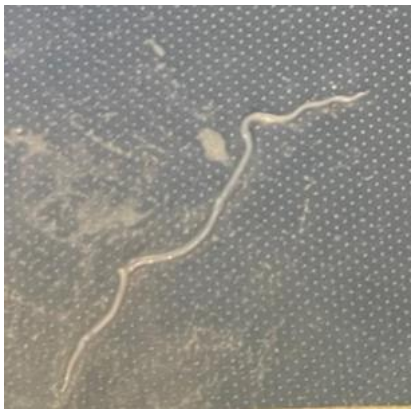

Fig 3: Eye Worm after surgery

Conclusion

Corneal incision procedure can be performed easily under field condition along with advantages like less duration for the surgical procedure and cost effective. Within 10 days the opacity decreased completely along with complete closure of the incision on the cornea.

References

1. Alsaad KM, Abbas BA, Yaseen J. Keratoconjunctivitis in Drought Horses in Basrah, Basrah-Iraq. Basrah Journal of Veterinary Research. 2012;11(1):155-163.
2. Patil DB, Parikh PV, Joy N, Jhala SK, Din Dar MU, Tiwari DK. Equine eye worm: A review of 50 cases. Indian Journal of Veterinary Surgery. 2011;33(1):61-62.
3. Deak G, Ionică AM, Oros NV, Gherman CM, Mihalca AD. Thelazia rhodesi in a dairy farm in Romania and successful treatment using eprinomectin. Parasitology international. 2021;80:102-183.
4. Baker DG. Eyeworm Disease (Thelaziasis) in Horses. Msd Manual.
5. Cotuțiu VD, Ionică AM, Lefkaditis M, Cazan CD, Hașaș AD, Mihalca AD. Thelazia lacrymalis in horses from Romania: epidemiology, morphology and phylogenetic analysis. Parasites & Vectors. 2022;15(1):425.
6. Dabas VS, Tyagi SK, Jhala SK, Suthar DN, Bhatt RH. Management of Ocular Setaria in Horses: A Review of 16 Cases. Journal of Animal Research. 2021;11(1):143-146.
7. Deka Boruah B, Mathieson A, Park SK, Zhang X, Wen B, Tan L, *et al*. Vanadium dioxide cathodes for high-rate photo-rechargeable zinc-ion batteries. Advanced Energy Materials. 2021 Apr;11(13):2100115.