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Thelaziasis in equines of Sabarkantha district of Gujarat

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Abstract

Three horses (2 females and 1 male) were presented at Veterinary clinical complex Sardarkrushinagar, with the history of severe conjunctivitis, lacrimation and corneal opacity in affected eyes for the diagnosis and treatment. The animal was clinically examined and *Thelazia* species was found in the affected eyes. The worm was surgically removed under general anaesthesia and collected and identified in light microscope.

Keywords: Thelaziasis, conjunctivitis, lacrimation, Veterinary clinical complex

Introduction

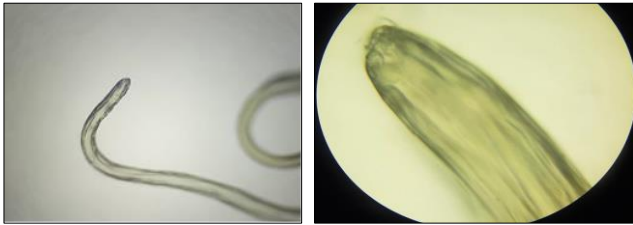
Thelazia is a nematode parasite which belongs to the order *Spirurida* of the superfamily Spiruroidea. Thelaziasis is a parasitic disease caused by nematodes of genus *Thelazia* in the conjunctival sac of their hosts. The males are 8-12 mm and female 14-18 mm long. The intermediate hosts for various *Thelazia* species are non-biting secretophagous flies, which ingest the first stage larvae during their meal on lachrymal secretions [1]. For *Thelazia* spp. infecting large ruminants and horses, *Musca autumnalis* seems to be the main vector. *Musca domestica* as well as other Muscidae species have also been suggested as vectors [2, 3]. The disease has garnered much attention within the past 2 decades, following the emergence of *Thelazia callipaeda* in carnivores and other hosts, including humans.

Case History and Clinical Observations

Three horses, 2 females (10 years & 5 years) and 1 male (2 years) were presented to Veterinary Clinical Complex, Sardarkrushinagar with a history of lacrimation for last two weeks. All the physiological parameters were within normal range. On the examination of the eye the presence of a moving worm in the anterior chamber. Corneal oedema and mild corneal opacity was observed in the affected eye. It was decided to remove the eye worm surgically.

Treatment and Discussion

General anaesthesia was given using xylazine hydrochloride @ 1.1 mg/kg body weight and ketamine hydrochloride @ 2.2 mg/kg body weight intravenously. The animal was restrained in lateral recumbency and the eye was prepared for an aseptic surgery. The cornea was desensitized with 4 drops of 2 % lignocaine. An incision of about 2 mm was made at 3 o'clock position at sclero corneal junction (limbus). The eye was infused with normal saline and the worm was popped out. Corneal incision was sutured in simple interrupted suture pattern using Vicryl size 6-0. After surgical procedure meloxicam given @ 0.2 mg/kg body weight, dicrystin 5 gm, tribivet given 20 ml and Tetanus toxoid given 5 ml intramuscularly Postoperatively, topical instillation of placentex gel, gatifloxacin eye drops 4 times daily was followed for seven days and bolus ivermectin given @ 0.2 mg/kg body weight orally. The retrieved worm was send for parasitological examination. The affected cornea became completely clear by the end of one week and the animal made an uneventful recovery.



Cranial view: head portion of the *Thelazia* sp.parasite



Gross photograph: *Thelazia* spp.

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