A Case Report of Ocular Thelaziosis in a Dog From Assam

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Abstract

A case of ocular thelaziosis due to Thelazia callipaeda in a local non-descript adult dog is reported in the present communication. Physical examination of the seriously ill dog attending the clinics revealed presence of several thin milky white worms moving inside the nictitating membrane of both eyes. The parasites were morphologically identified as Thelazia callipaeda. This constitutes the first report of T. callipaeda in dogs from Assam.

Key words: Thelazia callipaeda, Assam, Dog, Eye.

Thelazia callipaeda is a spirurid nematode parasite which inhabits the conjunctival sac of dogs, cats, wild carnivores and humans causing lacrimation, conjunctivitis, corneal opacity and keratitis. The fruit fly, Phortica variegata (Diptera, Dorsophilidae) is known to be the intermediate host which feeds on lachrymal fluid (Otranto et al., 2006). Infection with this parasite in man and dogs has been reported from Asian countries including India (Singh and Singh, 1993; Sharma et al., 2006; Lakshmanan et al., 2011). Although few cases of ocular thelaziosis caused by this nematode has been reported in human from the Northeast region of India (Singh and Singh., loc. cit.; Mahanta et al., 1996; Nath et al., 2008), no information is available yet on the occurrence of the parasite in dogs from this region. The present communication reports the occurrence of this parasite in dog from this region.

Case History and Observations

A local non-descript male pet dog aged about 3 years was brought to the Teaching Veterinary Clinical Complex of the College of Veterinary Science, Khanapara, Guwahati in a precarious condition with a history of dog bite seven days ago, off-fed for the last three days and continuous salivation. Physical examination revealed lateral recumbency, paddling of legs, drooling of saliva from mouth and mild conjunctivitis with lacrimation from both eyes. Examination of eyes revealed worms moving out of the nictitating membranes. A total of 39 worms were collected from the conjunctival sac of both eyes manually with the help of a fine pair of forceps. The worms were preserved in 70% alcohol after initial washing in normal saline. Individual male and female worms in temporary mounts were examined under microscope and their morphology studied for identification (Yamaguti, 1961; Soulsby, 1982). The animal died before any parasite specific treatment could be instituted.

Treatment and Discussion

Parasites recovered from the eyes of the dog were grossly slender and milky white. The males measured 10-12 mm and the females 16-19 mm in length. Under microscope, the cuticle of the worms had striations, serrated in profile and the mouth provided with a short cup-shaped buccal capsule. Male worms showed ventrally curved blunt pointed tail with papillae in front of the cloacal opening and several paired pre-cloacal and post-cloacal papillae. The spicules were dissimilar and one of them was more than 10 times longer than the other. Females had bluntly rounded straight tail with a pair of lateral papillae, vulva in the anterior oesophageal region and uterus with eggs containing larvae inside. The larvae when laid were found covered with the stretched egg shell. Morphological findings corroborated with the descriptions provided by Yamaguti, (Loc.cit.) and Soulsby, (Loc.cit.) for
**Thelazia callipaeda.**

There are numerous reports on the prevalence of helminths of the gastrointestinal tract and protozoan parasites occurring in dogs in India, but the report on ocular thelaziasis is very scanty and sporadic. Report of this parasite in dogs from Assam in the present study also bears significance from the public health point of view since it has been reported in human from Assam (Mahanta et al., loc.cit.; Nath et al., loc.cit.) and the neighbouring state of Manipur (Singh and Singh., loc.cit.).

**Summary**

Occurrence of ocular thelaziosis due to *Thelazia callipaeda* in a non-descript local dog is reported for the first time in Assam. Previous reports of ocular infection in human along with present record in dog justify the prevalence of this parasite and its zoonotic potential in the Northeast region, necessitating detailed epidemiological investigation.

**References**


**Diagnosis and Treatment of Paracetamol Poisoning in Domestic Cat (Felis Sylvester Catus)**

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**Abstract**

Non-target species are exposed to paracetamol by accidental consumption of tablets or direct administration by owners as self-medication. The diagnosis of acetaminophen toxicosis is more challenging in mammals because of the limited availability of laboratory tests to evaluate the paracetamol poisoning. The confirmative diagnosis is obtained based on history and clinical signs. Treatment for acetaminophen poisoning with N-acetyl cysteine intravenously can result in a favourable outcome in cats. This report describes the presenting signs, diagnosis and successful treatment of a house cat (Felis sylvestris catus) with direct paracetamol poisoning.

**Key words**: Paracetamol poisoning, acetaminophen, domestic cat, *Felis sylvestris catus*

Acetaminophen, commonly known as paracetamol, is a non-steroidal anti-inflammatory drug used commonly in human medicine for...