

Communication

A case report of *Thelazia* infection in a 15-month old heifer in Vom, Plateau State, Nigeria

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SALIFU (D.A.), HARUNA (E.S.), MAKINDE (A.A.), AJAYI (S.T.). Étude d'un cas d'infection à *Thelazia* chez une génisse âgée de 15 mois à Vom, Plateau State, Nigeria. *Revue Élev. Méd. vét. Pays trop.*, 1990, 42 (2) : 197-198.

Un cas d'infection oculaire chez une génisse, avec cécité bilatérale, opacité de la cornée, larmoiement excessif et jetage nasal, a été rapporté. Une guérison complète a été obtenue après un traitement de 6 à 10 gouttes d'une solution de lévamisole à 10 p. 100. Un total de 127 animaux adultes a recouvré la vue. *Mots clés* : Génisse - Oeil - Thélaziose - Lévamisole - Nigeria.

Introduction

Thelazia rhodesii are small milky-white worms parasitic on the eyes of cattle, sheep, goats and buffaloes (5). Their favorite habitat is the lachrymal ducts, but they often wander across the cornea or beneath the nictating membrane or eye lids.

Histologically conjunctivitis, hyperplasia of the lachrymal ducts and other inflammatory changes can be observed in the eyes. In other countries thelaziasis is associated with excessive lachrymation, photophobia, conjunctivitis and occasional keratitis and blindness in cattle and horses (3).

The number of worms present in the eyes, however, does not always correspond to the clinical manifestations of the disease as clinical signs may be absent (4). Several chemotherapeutic agents have been tried at different times by different authors (1, 2, 6) with good prognosis.

The importance of thelaziasis in cattle in Nigeria has not, however, been fully determined as it may be easily confused with infectious bovine kerato-conjunctivitis.

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This report is the first to highlight the devastating effects of thelaziasis on affected animals. These effects often lead to the inability of the animals to locate their feed and water leading to starvation while if the affected animal is a male it reduces its reproductive ability.

Materials and methods

A heifer was reported with bilateral blindness, excessive lachrymation, opaque cornea and nasal discharge. On examination of the eyes, small slender milky-white worms were seen wandering across the cornea, beneath the eye lids and nictating membrane while some were at both canthi of the eyes.

Both eyes were subjected to light test for signs of blindness and the animal was led near its food and left there to see if it could locate it. The cornea of both eyes were observed for opacity.

The eyes were flushed with normal saline and then 6-10 drops of a 10 % solution of levamisole were put into both eyes. Recovered worms were preserved in 10 % formal saline and microscopically examined after cleaning with lactophenol. The eyes were first examined every day for two weeks and later once every week for one month.

Results

Both eyes did not respond to the light test and the animal could not locate its food indicating total blindness. Cornea opacity was observed in both eyes.

A total of 127 adult *Thelazia rhodesii* worms were recovered and identified. Both eyes were infested and there was complete recovery seven days after a single treatment with 6-10 drops of a 10 % levamisole solution as no more worms were recovered during this study lasting one month and a half.

Discussion

This report shows that *Thelazia rhodesii* was responsible for the temporary bilateral blindness, opacity of the cornea, excessive lachrymation and nasal discharge observed in the affected animal. One application of a 10 % levamisole solution was found to be highly effective against the *T. rhodesii* infection. It is recommended to treat affected cattle in this way since the drug is readily available. This confirms the results of VASSILIADES *et al.* (6) in 1975, in Senegal, who found an application of eye-drops of 1 % levamisole effective, as well as a drench of levamisole chlorhydrate at a dose of 5 mg/kg body weight.

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Other drugs like tetramisole (2) and 2 % aqueous solution of piperazine adipate (1) have also been found to be quite effective against *Thelazia* infection in cattle. VASSILIADES *et al.* (6) reported that other drugs were also very effective against *Thelazia* infection in cattle: 4 % morantel tartrate in the eyes; tetramisole as a drench at a dose of 15 mg/kg.

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A case of eye infection in a heifer was reported with bilateral blindness, cornea opacity, excessive lachrymation and nasal discharge. Treatment with 6-10 drops of a 10 % solution of levamisole resulted in a complete recovery, a total of 127 adult *Thelazia rhodesii* being recovered from the eyes. *Key words*: Heifer - *Thelazia* infection - Eye - Anthelmintics - Levamisole - Nigeria.

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