Cutaneous larva migrans on the scalp: atypical presentation of a common disease

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INTRODUCTION

Cutaneous larva migrans (CLM), also known as “migrant linear epidermitis”, “beach worm”, “migrant helminthiasis”, “dermatitis serpiginosa”, “creeping eruption” or “sand worm” is a zoodermatosi caused by cutaneous penetration of helminth larvae, usually parasites of the small intestines of cats and dogs.1 It is a common occurrence in tropical and subtropical countries and in people who visit beaches or sandy terrains which are polluted with feces of dogs and cats.2

Clinically it is characterized by the presence of intensely pruritic erythematous tunnels of linear and serpiginous character. From the point where there is larva penetration, tunnels are formed that usually draw an irregular and capricious path, progressing 2 to 5 cm per day.1,3 Sometimes, the wiggling line is restricted to a small area and in others, it extends itself like the drawing of a map. The lesion topography usually depends on the area which is in wider contact with the ground, like feet, legs or gluteal regions.1,4

According to the literature, scalp involvement by CLM is rare, as shown in a review of 158 cases of the disease, none of which presented scalp lesions.1,5,6 The number of larvae and, therefore, the number of inflammatory linear routes varies from a single one to tens or hundreds of them.1,4 The authors report a case of cutaneous larva migrans on scalp with the objective of demonstrating an atypical presentation of the disease.

CASE REPORT

Male patient, 11-year-old, was admitted presenting intense pruritus on elbows, legs and scalp for approximately two weeks. He denied previous treatment and comorbidities. He reported practicing recreational activities on the beach, like soccer, every weekend. At the dermatological exam, we observed the presence of hair rarefaction on the left parietal region, with an erythematous string of serpiginous and irregular path in its center (Figure 1); eczema-like lesions of linear and angular path on anterior lateral face of the distal-third of the left leg, ankle and foot (Figure 2).

The clinical characteristics of the lesions and epidemiological history with weekly activities on beach sand are very suggestive for the diagnosis of cutaneous larva migrans. Therefore, considering the diagnosis, a treatment was prescribed with a single dose of ivermectin 6mg and tiabendazole ointment, 50mg/g, 3x per day for 7 days. A clinical cure was achieved after one week of use of the drugs.

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DISCUSSION

The main species responsible for the clinical picture of CLM are *Ancylostoma caninum* and *Ancylostoma braziliense*, with both species presenting approximately 1 cm of length.1,2 Among the agents that can also cause the disease are other parasitic larvae of dogs and cats, such as *Uncinaria stenocephala*, *Ancylostoma tubaeforme*, *Gnathostoma spinigerum* and some strains of *Strongyloides stercoralis*: bovine parasites, *Bunostomum phlebotomum*; rodents parasites, *Strongyloides mystopati* and of wild dogs, *Strongyloides procyonis*. Larvae of *Gasterophilus* and *Hypoderma* flies and ants of *Solenopis geminata* species may also cause the same clinical manifestations.1,7,8,9 Another parasitic larva of dogs that deserves emphasis is the species *Toxocara canis*, which on men can cause visceral and ocular *larva migrans*.1,3

The diagnosis is based on clinical history, on the serpiginous and migratory aspect of lesions, which may be made more difficult by eczematization and secondary infections.1,10 In the present case, the clinical diagnosis of CLM was considered by association of clinical characteristics, intense pruritus and history of frequent recreational activities on beach sand.

Depending on the number of lesions and their localization, the treatment can be topical or systemic. The drugs of choice are: albendazole 400mg/day for 3 days, ivermectin 200mcg/kg in a single dose or tiabendazole 25mg/kg/day, divided into two doses for 5 days. If there are few lesions, the tiabendazole ointment or cream 10% may be used.1,4 Due to posological convenience and considering greater compliance to the treatment with a single oral dose, ivermectin was indicated as the drug of choice. The association of the topical drug was the option of the authors to ensure fast improvement of the pruritus.

We consider of fundamental importance for a correct diagnosis and adequate treatment that dermatological semiology be carefully conducted. The publication of this clinical case is of interest because the patient presented CLM in an uncommon topography. Concomitant typical lesions on other sites facilitated the diagnosis.

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