

Enfermedades Infecciosas y Microbiología Clínica

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Diagnosis at first sight

Interdigital and sole of the feet pruritus

Prurito interdigital y plantar de ambos miembros inferiores

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Enfermedades

Microbiología Clínica

Case report

This was the case of a 33-year-old man, with no personal history of interest, who consulted for erythematous and pruritic lesions on both feet after a trip to Central America a week earlier. During his stay he frequented beaches without wearing flip flops or another type of footwear. In addition, a companion who accompanied him on the trip also exhibited the same symptoms.

The physical examination revealed very pruritic erythematous intradermal lesions with a serpiginous appearance, located between the toes and on the soles of both feet (Fig. 1). The rest of the physical examination, including the neurological examination, revealed no relevant findings.

Laboratory tests revealed an IgE elevation of 114 kU/l without eosinophilia, with the rest of the parameters within normal limits. A chest X-ray was performed with no pulmonary infiltrates detected, ruling out Loeffler's syndrome.



Fig. 1. Serpiginous erythematous lesions on both feet (A, B, C).



Fig. 2. Resolution of lesions after treatment with albendazole.

Clinical course

With the diagnosis of cutaneous larva migrans, the patient received initial treatment with a single 12-mg dose of oral ivermectin for a body weight of 65 kg, with poor response. A second line of treatment was then started with oral albendazole 400 mg daily for seven days, presenting with very favourable clinical progression and resolution *ad integrum* of the lesions (Fig. 2).

Closing remarks

The current increase in tourism to endemic areas and migratory movements have led to a higher incidence of tropical diseases in Europe.¹ Cutaneous larva migrans is a term used to designate skin manifestations secondary to infestation by nematodes after contact with contaminated soil, mainly in South and Central America, and also in some southern states of the United States. It can be caused by various species, the most common of which being Ancvlostoma braziliense. The diagnosis of this entity is mainly clinical, and it is vitally important to inquire about trips to endemic areas. Clinically, it is characterised by erythematous, serpiginous and very pruritic lesions, located in areas that come into contact with the ground, such as the feet, lower limbs and trunk.² Skin biopsy is not necessary as it is not very effective because in most cases the larva is not found in the visible lesion. Laboratory tests can show eosinophilia and/or increased IgE, although they are not constant findings. Regarding treatment, preventive measures, such as the use of footwear, are essential. Despite the fact that it is a disease that is self-limited to one to three months until the larva dies, the

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intense itching and discomfort that it causes lead to the initiation of treatment. Treatment consists of oral albendazole 400 mg/day for three days, which can be extended to seven days for extensive lesions; or oral ivermectin 200 μ g/kg/day for one to two days, usually with good clinical response.^{2,3}

This entity should be suspected if erythematous and pruritic lesions with a serpiginous appearance are found in patients who have travelled to or come from endemic areas with a history of contact with contaminated soil. Therefore, a complete clinical history is essential to guide the diagnosis and choice of the most appropriate treatment.

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Conflicts of interest

The authors have no conflicts of interest to declare.

References

- 1. Ju T, Vander Does A, Ingrasci G, Norton SA, Yosipovitch G. Tropical parasitic itch in returned travellers and immigrants from endemic areas. J Eur Acad Dermatol Venereol. 2022;36:2279–90, http://dx.doi.org/10.1111/jdv.18408.
- Heukelbach J, Feldmeier H. Epidemiological and clinical characteristics of hookworm-related cutaneous larva migrans. Lancet Infect Dis. 2008;8:302–9, http://dx.doi.org/10.1016/S1473-3099(08)70098-7.
- 3. Bouchaud O, Houzé S, Schiemann R, Durand R, Ralaimazava P, Ruggeri C, et al. Cutaneous larva migrans in travelers: a prospective study, with assessment of therapy with Ivermectin. Clin Infect Dis. 2000;31:493–8, http://dx.doi.org/10.1086/313942.