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Efficacy of albendazole ointment on cutaneous larva migrans in a 2 years child☆

Eficacia del albendazol tópico en el tratamiento de la larva cutánea migrans en un niño de 2 años

Cutaneous larva migrans is an infestation caused by the penetration and migration in the skin of nematode larvae (geohelminths). The most common aetiological agent is Ancylostoma braziliense, although many other species may be involved, such as Ancylostoma caninum and Uncinaria stenocephala,[1] depending on the geographical area. The incidence in Spain has grown, due to the increased numbers of travellers and immigrants from the tropical and subtropical areas in which this condition is endemic.[2,3] The clinical presentation, in the form of serpiginous-looking erythematous lesions which move ahead at one end (creeping eruption), is characteristic and makes it easy to diagnose, without the need for biopsy.[3–5] The lesion is usually limited to the skin, as humans are an incidental host and the parasite is unable to complete its life cycle in humans.[3,5] The course of the infestation is usually benign and, in most cases, self-limiting due to the death of the larva within one to three months.[3,4]

Fig. 1. (A) In the initial image we can see the sinuous trajectory of translucent brown structures, related to the body of the larva. (B) In subsequent check-ups (day 5 of treatment) an improvement of the lesion can be seen. (C) After 10 days of treatment, the structure is no longer evident, but we see an empty trajectory and clinical improvement.

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Intense pruritus, combined with the possibility of complications (impetigo due to scratching and allergic reactions), make treatment a necessity.[2] Various different modes of treatment have been used in the management of cutaneous larva migrans, including physical treatments such as cryotherapy on the edge of the lesion, which is often painful and ineffective as monotherapy[6]; topical treatments such as thiabendazole, which is difficult to find in many countries; and systemic treatments such as albendazole and ivermectin, which are effective but can cause adverse effects such as gastrointestinal discomfort and skin changes. Albendazole can also cause headache, transient alopecia, fever, increased intracranial pressure and elevation of liver enzymes, while ivermectin can cause effects such as tachycardia, hypotension, dizziness and eye symptoms.[1,2] The differential diagnosis should be made with other skin lesions such as scabies, larva currens (strongyloidiasis), filariasis (Loa loa, Onchocerca volvulus), gnathostomiasis, paragonimiasis and cutaneous myiasis, fascioliasis, bacterial and fungal skin infections, and contact dermatitis.[7]

We present the case of a 2-year-old male patient from Senegal weighing 12.5 kg with a six-month history of serpiginous and intensely pruritic lesions in both lower limbs and his left buttock, compatible with cutaneous larva migrans (Fig. 1A).

The recommended treatment was a single oral dose of 12 mg of ivermectin, which provides cure rates of 81–100%, or albendazole 400 mg, which has cure rates of 46–100%.[7,8] Both are effective and generally well tolerated drugs, but they can cause adverse effects and should be used with caution orally in young children.

An alternative would have been topical treatment of the affected area with thiabendazole 10–15% in ointment or solution.[9] The problem is that this medicinal product is not marketed in Spain, has limited value for multiple lesions and folliculitis caused by helminths, and requires applications three times a day for at least 15 days.[7,9] Oral thiabendazole is not very effective when administered as a single dose (cure rate of 68–84%) and is worse tolerated than albendazole or ivermectin.[7,8]

We decided to use a paste of 10% albendazole prepared by crushing three 400 mg tablets in 12 g of Vaseline, which was applied three times a day for five days, with which there was obvious improvement (Fig. 1B). To obtain a greater occlusive effect on the lesions and to facilitate adherence to the treatment, we changed the above preparation for an ointment made with three albendazole 400 mg tablets diluted in water and combined with lanolin and Vaseline. It was only necessary to apply it twice a day for five more days, enough time to achieve the healing of the lesions (Fig. 1C).

Our findings are consistent with and complement those of other authors who suggest that the topical application of albendazole 10% for ten days, twice or three times a day depending on the type of formulation used, is an effective, safe and accessible treatment option for cutaneous larva migrans in situations where oral treatment is contraindicated.[1,2]

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Conflicts of interest

The authors declare that they have no conflicts of interest.

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