Id reaction following the treatment of a cutaneous larva migrans

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Key words: autosensitization dermatitis; cutaneous larva migrans; Id reaction.

INTRODUCTION

Id reaction or autosensitization dermatitis is an acute skin reaction that develops at a site distant from a primary inflammatory focus.[1,2] It is frequently associated with skin infections. It can clinically show various presentations, such as eczematous, urticarial, lichenoid, morbilliform, psoriatic, or as erythema nodosum and erythema multiforme, or rosacea.

CASE REPORT

A 25-year-old woman presented with a serpiginous cutaneous lesion located on the plantar aspect of the foot. This lesion had appeared 10 days earlier while she was on vacation in Brazil in the Porto Seguro region. The clinical appearance was typical of hookworm cutaneous larva migrans (CLM) (Fig 1). She remembered having walked bare feet on the sand. She was treated with ivermectin at a dose of 200 micrograms per kg in a single dose. The next day, she called because she experienced a worsening of the plantar lesion and sent a photograph using her smartphone (Fig 2), confirming the worsening of the skin lesions. We concluded that the reaction was because of an exacerbation of the skin lesions caused by the lysis of the parasite and reassured the patient. Six days later, she presented with an eruption of itchy, slightly erythematous papules on the dorsal aspects of the hands and feet with a sensation of swollen hands (Fig 3) and feet (Fig 4). She was diagnosed with an id reaction, and the rash resolved spontaneously within several days.

DISCUSSION

CLM is typically acquired in warm tropical or subtropical countries.[3-5] It is caused by the epidermal migration of hookworm nematodes larvae; mainly *Ancylostoma braziliense* and occasionally, *Ancylostoma caninum,* or *Uncinaria stenocephala,*[3-5] which are parasitic of animals, such as cats and dogs. The larvae penetrate the skin after contact with soil and cause a typical creeping eruption and the disease is self-limiting.[1-3] The treatment is based on the systemic or local formulations of anti-nematodes drug, such as albendazole or ivermectin. In our patient, the most likely diagnosis was an id reaction. A drug eruption to ivermectin cannot be excluded; however, cutaneous adverse reactions associated with systemic ivermectin are rare.[6-9] A drug eruption would not be limited to both hands and feet but would involve the whole body. Id reaction was

Abbreviation used:

CLM: cutaneous larva migrans

Fig 1. Serpiginous erythematous tracts on the plantar foot.

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Fig 2. Inflammation of the CLM of the plantar foot (24 hours after intake of ivermectin). *CLM*, Cutaneous larva migrans.

Fig 3. Erythematous and papular eruption of the hand.

suspected because hands and feet skin manifestations were associated with the plantar inflammatory CLM after treatment. An eczematous reaction has been reported with CLM,[10] indicating that skin reactions can occur associated with CLM. Our patient had both inflammatory reaction at the site of CLM and distal id reaction, which to our knowledge, has not been reported during CLM treatment.

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Fig 4. Erythematous papular eruption of the foot.

Conflicts of interest

None disclosed.

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