Answer to Dermacase *continued from page 489*

1. Cutaneous larva migrans

Cutaneous larva migrans (CLM) is a serpiginous eruption usually occurring on the skin of the feet, abdomen, buttocks, hands, and genitals. It is caused by dog and cat hookworms (ie, nematodes), most commonly *Ancylostoma braziliense,* whose larvae penetrate the skin, resulting in a creeping eruption (ie, larva migrans).

Creeping eruptions are a result of the skin's hypersensitivity reaction to these worms and their by-products. Some individuals, such as fishermen, gardeners, sunbathers, hunters, and construction workers, are more prone to infestation. The disease is typically reported from tropical and subtropical areas, and is endemic in the Caribbean, Central and South America, Southeast Asia, and Africa.[1] Exact rates of incidence are unknown; however, one report showed that 6.7% of patients visiting a travel-related disease clinic had CLM.[2] Cutaneous larva migrans is rated second to pinworm among helminthic infections in developed countries.

Patients with CLM might remember a stinging sensation upon initial penetration of the larvae. A reddish papule or a nonspecific dermatitis can develop hours after penetration. The passage of the larvae produces a 2- to 4-mm wide, erythematous, elevated, and serpentine track. Vesicular and papular lesions might be observed in conjunction with the linear track. The rate of larval migration ranges from a few millimetres to a few centimetres per day,[3] depending on the species of larva. The actual location of the larvae is typically 1 to 2 cm away from the erythematous track.

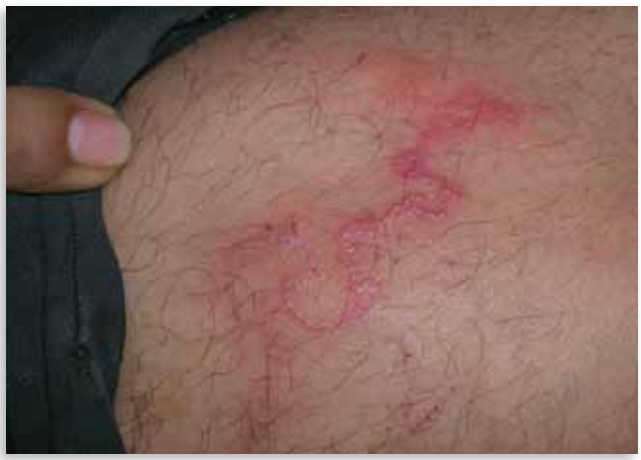
Severely excoriated lesions might lead to secondary bacterial infection. Hyperinfestation of larvae can give rise to Löffler syndrome, although this is rare; it is characterized by pulmonary infiltrates and eosinophilia.[4]

Prognosis of CLM is excellent. The larvae wander aimlessly in the epidermis and are incapable of completing their life cycle within the human body. Even without treatment, they ultimately die and the cutaneous lesions subside in weeks to months.

Diagnosis

The characteristic clinical features of CLM, in conjunction with the epidemiologic background, form the basis of diagnosis.[5] Skin biopsy is not of much use, as the larvae are usually located several centimetres away from the edge of the track.[6] A few patients demonstrate peripheral eosinophilia or increased serum immunoglobulin E levels. Optical coherence tomography, a new technique, can also allow rapid, noninvasive, in vivo diagnosis of CLM.[7]

Relative ease of international travel necessitates consideration of CLM in the differential diagnosis of serpiginous pruritic lesions, wherever the location of practice.



Treatment

Although the condition is self-limiting and the larvae usually die within a couple of months, the intense pruritus and risk of infection often warrant treatment. Moreover, patients might not want to wait out the natural healing process of the disease.

Although double-blind controlled studies are lacking, anthelmintics are considered to be the drugs of choice for CLM. These agents include ivermectin (200 µg/kg, single dose), albendazole (400 mg/d for 3 days),[8] thiabendazole (25 to 50 mg/d for 2 to 5 days),[1] and mebendazole (200 mg twice daily for 4 days). Antihistamines and topical corticosteroids can be used in addition to anthelmintics for symptomatic relief of pruritus. Topical thiabendazole ointment has shown good efficacy in a few small case series.[9] Treatment of this condition with cryotherapy is rarely effective.[10] Oral antibiotics are only used if secondary impetiginization or cellulitis is present.

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Competing interests
None declared

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