

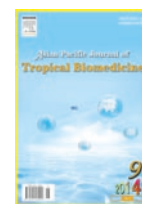
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A case report of cutaneous larva migrans in a Mexican population of high marginalization

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ABSTRACT

The creeping verminous dermatitis or cutaneous larva migrans is a parasitosis caused by percutaneous penetration and migration of larval nematode parasites characterized by producing one or more serpiginous erythematous, indurated, raised and pruritic lesion. The most common cause of cutaneous larva migrans is the *Ancylostoma braziliense* located in warm climate zones. In the present study, authors reported a case of cutaneous larva migrans with a characteristic clinical picture: erythematous–papular and vesicular lesion and serpiginous path, with progressive, and pruritic growth and it shown that a living area with immigration, tropical weather conditions and poverty may lead to this common infection.

1. Introduction

Cutaneous larva migrans (CLM) is a creeping eruption of the skin, which is caused by an accidental infection and migration of nematode larvae. Usually the hookworm comes from dogs, cats and other mammals, through the epidermis[1]. *Ancylostoma braziliense* is the most common cause of CLM[1]. Other skin penetrating nematode larvae include *Ancylostoma caninum*, *Uncinaria stenocephala*, *Bunostomum phlebotomum*, and *Strongyloides stercoralis*[1–3]. Sometimes other

parasites include *Gnathostoma spinigerum*, *Strongyloides procyonis*, *Dirofilaria repens*, and some forms of myiasis can cause migratory skin lesions[4]. CLM is the most common tropically dermatosis[5]. The first report is done by Lee in 1874[6]. Because of biogeographical conditions, this disease often affects travelers returning from warm climate countries[7]. The disease is endemic in resource–poor communities in the developing world, particularly in Brazil, India, and the West Indies. It occurs sporadically or in the form of small epidemics in high–income countries and is reported in tourists who have visited the tropics[8]. This case was found in a Mexican population of high marginalization in the state of Veracruz.

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2. Case report

A 39–year–old male with job of masonrywall was

admitted in our medical office of the Cristobal Colon University, for present pruritic, painful cutaneous lesions, which had been progressing for 1 week. The physical examination revealed a serpiginous lesion in skin, with vesicles in the lateral region of the left annular finger (Figures 1 and 2). This patient was found to present with signs and symptoms of diabetes mellitus. There was no eosinophilia in the blood count, the glucose was increased and there was glucosuria and proteinuria in the urinalysis. The patient was treated with oral albendazole (400 mg per day for 7 d) and dicloxacillin (500 mg every 8 h for 8 d) for secondary infection signs.



Figure 1. Photograph of lateral aspect of the left annular finger showing serpiginous lesion in skin.



Figure 2. Photograph of lateral aspect of the left annular finger showing purpuric vesicles.

3. Discussion

CLM is a frequent disease in tropical and subtropical countries. The endemic nature of this disease is caused by poor sanitation and environmental conditions^[5]. Accidentally, the cutaneous larva migrans can enter the epidermis but cannot penetrate the dermis, so they migrate within the epidermis for a few weeks before dying^[5]. The clinical appearance of this infestation is a serpiginous cutaneous eruption usually occurring on the skin of the feet, abdomen, buttocks, hands, and genitals^[9]. Eruption is a result of the skin's hypersensitivity reaction to these

worms and their by-products^[9].

The diagnosis of CLM is based on physical examination in conjunction with the epidemiologic background^[5,10]. Our patient lives in a highly marginal zone of Veracruz with very frequent tourist activities and a significant number of immigrants from South America. This living environment, in addition to the patient's work in masonry, generates greater contact with contaminated soil with *A. braziliense*.

Although laboratory studies show that the patient has diabetes mellitus type 2 and diabetic nephropathy, in the blood count, eosinophil values were normal, ruling Löffler's syndrome.

Conflict of interest statement

We declare that we have no conflict of interest.

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