

Cutaneous Larva Migrans

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A 43-year-old Indonesian male manual labourer presented with a five-day history of an erythematous, raised, track-like eruption on the lateral aspect of his right hand. He reported frequent exposure to soil during work but denied recent travel or contact with animals. Mild pruritus was present, without pain, tenderness, or systemic symptoms. Examination revealed a single, serpiginous, raised, erythematous tract approximately 5 cm in length with surrounding mild edema (**Figure 1a**). No lymphadenopathy or signs of secondary infection were observed. A follow-up at one week of proper treatment demonstrated significant regression of the lesion with complete resolution of pruritus (**Figure 1b**).

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The patient was diagnosed and treated for cutaneous larva migrans (CLM). The rash described and shown in (**Figure 1**) is typical of CLM – a serpiginous, raised, erythematous tract approximately 5 cm in length with surrounding mild oedema, that may move. This case demonstrates the classic presentation of CLM, a common tropical skin condition caused by percutaneous penetration of animal hookworm larvae, most often *Ancylostoma braziliense* and *Ancylostoma caninum*.¹

Animal hookworms live in the intestines of dogs and cats, shedding eggs in their faeces that hatch within a day in soil or sand.² The larvae can infect humans through direct skin contact but only penetrate the skin's surface, preventing them from completing their life cycle and making the condition self-limiting.² The larvae induce an inflammatory reaction along their migration path that can last for weeks.³ In some cases, they may reach deeper tissues, and rarely, pulmonary involvement occurs through direct invasion or due to a systemic immunologic response.³

Hookworm infections are common in tropical and subtropical regions, affecting an estimated 500 million people globally.⁴ The highest prevalence occurs in sub-Saharan Africa, with lower rates in Asia, Latin America, and the Caribbean. Hookworm infections are rare in areas receiving less than 40 inches of rainfall annually.⁴

The characteristic serpiginous, raised, erythematous track shows the larva's migration through the epidermis at a rate of several millimeters to centimeters per day.¹ The feet, hands, and buttocks are the most common sites, matching areas of direct skin contact with soil.¹ Although the infection is self-limiting, lasting weeks to months without treatment, the associated itching can be intense and may lead to secondary bacterial infection from scratching.¹ Diagnosis is mainly clinical, based on the distinctive appearance combined with relevant exposure history.¹ The differential diagnosis includes other causes of serpiginous lesions such as superficial bacterial infections, contact dermatitis, or other parasitic infestations.¹

Local disease has traditionally been treated with cryotherapy, but using liquid nitrogen, solid carbon dioxide, or ethylene chloride spray has proven ineffective and should be avoided.² For multiple lesions or severe infestations, albendazole and ivermectin are the first-line systemic therapies.² Oral albendazole (400 mg daily for 3 to 5 days) and oral ivermectin (a single 12

mg dose) both have nearly 100% cure rates.² While systemic corticosteroids can reduce itching, their side effects limit their effectiveness.²

Based on the characteristic clinical presentation and occupational soil exposure history, a diagnosis of cutaneous larva migrans was confirmed. The patient was treated with oral albendazole 400 mg daily for three days, taken with fatty meals to improve absorption. The excellent response to albendazole in this case, with quick resolution of symptoms and lesion regression, confirms both the diagnosis and the effectiveness of the treatment. Follow-up one week later showed significant clinical improvement, with notable regression of the lesion and complete relief of pruritus (**Figure 1b**). The serpiginous tract had significantly flattened, leaving only residual hyperpigmentation marking the larva's migratory path.

This case highlights the importance of recognising CLM in patients with relevant exposure history, especially in occupational settings involving soil contact. Early diagnosis and treatment prevent prolonged illness and potential complications from this easily treatable condition.

Abbreviation

CLM Cutaneous larva migrans

Declarations

Conflict of interests

The authors declare no conflict of interests.

Patient Consent

Patient consent has been obtained.

Acknowledgement

None

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