

Cutaneous Larva Migrans: A Case Report

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Abstract:

Cutaneous larva migrans (CLM) or Creeping eruption is caused by infection with filariform larvae of animal hookworms, most commonly found in sandy or moist soil of tropical and subtropical regions. People who walk barefoot are at risk of acquiring infection. The diagnosis is usually made clinically based on the characteristic serpentine cutaneous lesion at the point of entry of larva. The disease is self limiting, and associated severe pruritus mandates the treatment. A case of CLM is being reported here.

Keywords: *Cutaneous Larva Migrans.*

INTRODUCTION

Cutaneous larva migrans (CLM) also called Creeping eruption, sandworm eruption, plumber's itch is caused by infection with larvae of animal hookworms commonly seen in tropical and subtropical areas. Bare foot walkers, gardeners, farmers, seabathers, children playing in sand pits and plumbers working under the houses are at high risk of acquiring infection due to contamination of skin with animal feces. Due to penetration of skin and migration there is characteristic itchy erythematous, raised and vesicular, linear or serpentine cutaneous lesion at the point of entry. The disease is self-limiting usually lasts for 4 – 6 weeks until the larva dies. In severe infestations CLM can be accompanied by Löeffler's syndrome of pulmonary eosinophilia.¹

CASE REPORT

A 40-year old woman from a rural area in south India presented with history of intensely itchy migrating thread like lesion over the right foot since 5 days (Fig). She often worked in the fields bare footed. She had no other skin lesions elsewhere. On examination there was a typical erythematous, raised, curvilinear lesion on the dorsum of right foot near the little toe. Baseline hematological and biochemical investigations were within normal limits. A diagnosis of CLM was made on clinical grounds. She was treated with Albendazole 400mg/day orally for 3 days and subsequently on follow up visit after 1 week the lesion had healed.

DISCUSSION

Creeping eruption is a common problem in tropical

countries especially in developing countries like Brazil and India due to overcrowding, poor hygiene and sanitation problems. The disease is endemic in tropics and subtropical areas and occurs in small epidemics in high income countries. Tourists who visit tropical countries are commonly affected with creeping eruption.²

CLM is caused by infection with larvae of animal hookworms like *Ankylostoma caninum*, *A.braziliense*, *A. ceylonicum*, *Uncinaria stenocephala* and *Bubostomum phlebotomum*. *Uncinaria stenocephala*, etc. Most common offender is larvae of dog or cat hook worms (*Ankylostoma caninum* and *A.braziliense*), which penetrate intact, exposed skin and migrates through the epidermis.³ Risk of acquiring infection is high in barefoot walkers, gardeners, farmers, children playing in sand pits and plumbers working under the houses due to increased chances of contamination of skin with animal feces.¹

Common sites involved are sole, buttocks, back and thighs which may have rested on contaminated sand. The larvae after penetration in the epidermis migrates in a serpigenous route at a speed of 2-3 cm/day. Clinically

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Figure1: Picture of left foot showing typical curvilinear lesion of creeping eruption



eruption usually develops 1-6 days following skin penetration and presents as a severely pruritic, erythematous, serpiginous burrow. Pain can be present in papulovesicular lesions. If not

treated the larvae usually die in 2-8 weeks as humans are accidental and 'dead-end' host.⁴

In severe infestation CLM can be accompanied by loeffler's syndrome of pulmonary eosinophilia, urticaria,² and very rarely eosinophilic enteritis when larvae migrate to small intestine.⁵ Lesion of CLM can be mistaken for Tinea pedis, Impetigo etc. If observed carefully the characteristic serpiginous lesion of CLM combined with history of possible exposure, the diagnosis of CLM can be easily made, and biopsy is of no value as the larvae migrates ahead of the serpiginous tract.

Topical Thiobendazole 10% cream is the treatment of choice which has to be applied four times a day until the lesion heals. This regimen is of great efficacy and least toxicity. Other options are single dose of Ivermectin 200µg, oral Albendazole 400mg daily for 5-7 days.⁶

CLM is a self-limiting disease. Intense pruritus and risk of infection mandate treatment. CLM can be easily prevented by avoiding skin contact with moist soil contaminated with animal feces and adequately covering the feet when visiting tropical countries, especially beaches, sandy and moist areas.

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