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Case Report

Extensive cutaneous larva migrans: A case report

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Abstract Cutaneous larva migrans (CLM) is common parasitic infestation in warmer climates among people, who have contact with contaminated soil. It is caused by migration of hookworm larvae into the human skin. Clinically an itchy, erythematous, linear serpiginous tract appears within days to even months after exposure to infested sand or soil. Diagnosis is established on the clinical presentation. We describe a case of disseminated CLM presented in our OPD.

Key words
Creeping eruption, cutaneous larva migrans, hookworm infection.

Introduction

Cutaneous larva migrans (CLM) presents with the lesions, which seem to creep or migrate. These lesions occur due to the movement of parasites in the skin. CLM is caused by larvae of hookworms living in the intestines of dogs and cats.[1] The ova of these parasites are found in the animals' feces and under favourable conditions they hatch and the larvae coming into contact with human skin can penetrate it. Human disease is due to incidental infestation by these larvae. Visceral larva migrans also occurs.[1] The parasites are mostly found in tropical and subtropical regions in Central and South America, Africa and South-East Asia.[2] The infection is acquired by children, farmers, gardeners, hunters and plumbers coming in contact with the contaminated soil.[2]

We report a case of disseminated CLM presented in our OPD, on the legs of a 50-year-old woman, who kept cats as pets and indulged in gardening.

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Case Report

A 50-year-old female presented to our outpatient department with complaints of intense itching and erythematous lesions on both legs. Patient initially noticed an erythematous papule on right leg, which rapidly enlarged in size forming a serpentine lesion. Multiple such lesions appeared on both legs. Itching was quite intense. She used different medications including antibiotics and antihistamines without any improvement. History revealed that she was fond of gardening and kept many pet cats. Examination revealed multiple slightly raised erythematous serpentine lesions 2-3mm in diameter with surrounding edema on the right leg and one lesion on left thigh **(Figure 1)**.

Peripheral blood analysis and total IgE level were within normal ranges. The location and characteristic presentation of linear serpiginous skin lesions on the legs, as well as, the history of contact with cats made it possible to diagnose her with cutaneous larva migrans.

Figure 1 Serpiginous lesion on left thigh

Figure 2 Lesion of cutaneous larva migrans at the time of presentation.

Figure 3 Follow-up after one week.

Figure 4 Follow-up after four weeks

The patient was treated with oral ivermectin (200 µg/ kg single dose). Oral antihistamines were also given for severe pruritus. She was asked to visit after a week and then after four weeks. The follow-up visits showed complete remission of lesions along with improvement in symptoms **(Figure 2 & 3)**.

Discussion

The most common parasite species causing creeping eruption are *Ancylostoma braziliense*, *A. caninum*, *Necator americanus*, *Uncinaria stenocephala* and *Strongyloides stencophala*.[2] The sites commonly affected are feet, hands and buttocks. The eruption starts with an erythematous, pruritic papule at the site of entrance of larvae. The creeping activity of these parasites produce migratory thread like lesion. Erythematous, slightly raised, serpentine tracks are seen on the skin.[3] The larvae advance at the rate of a few millimeters to few centimeters daily, remaining confined to a smaller area of the body. There is associated intense itching.

Excoriation marks, dermatitis and bacterial infections are also seen. In later stages, these tracks are difficult to see, the path being marked by small itchy and discontinuous nodules. Systemic signs include peripheral eosinophilia (Loeffler syndrome), migratory pulmonary infiltrates and increased immunoglobulin E (IgE) levels, but these are rarely seen.[4,5]

The disease is self- limiting resolving in weeks or months depending on the species of larva.[1] Therapeutic options for CLM include a single dose of ivermectin (200 μg/kg body weight), oral albendazole 400mg daily for 5-7 days, thiabendazole (50mg/Kg body weight) for 2-4 days. Topical thiabendazole 10% cream is preferred over the oral form due to the side effects reported after oral intake of the medicine.[6] Different other treatment modalities have also been used for cutaneous and ocular larva migrans including topical ivermectin, cryotherapy CO2 and Nd:YAG lasers.[7-11]

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