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CASE REPORT

Cutaneous Larva Migrans

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Abstract:

Cutaneous larva migrans is a parasitic skin infection characterized by progressive linear or serpiginous lesions most commonly seen over the dorsum and plantar aspect of the foot. We report a case of cutaneous larva migrans in a 15 year old male at an unusual site, successfully treated with Ivermectin and Albendazole.

Keywords: Cutaneous larva migrans, creeping eruption, forearm

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Introduction

Cutaneous larva migrans is a parasitic skin infection diagnosed on the basis of clinical presentation. It is characterized by progressive linear or serpiginous lesions most commonly seen over the dorsum and soles of the foot. These infections are commonly caused due to tropical climate, sunbathing, walking barefoot on beach, poor hygiene and overcrowding [1].

Case report

A 15 year old male presented with chief complaints of lesions over the left forearm since 3 days. He had no similar lesions on any other part of the body. There was no itching or burning sensation over the lesion. On further inquiry he gave history of spending long hours on a beach in Goa. Within a week of his return from the beach he developed the lesions on the forearm. There is no history of any pets in the house or similar lesions affecting other family members.

No history of fever or trauma preceding the lesions.

General and systemic examinations were within normal limits. Local examination revealed three serpiginous, erythematous and slightly elevated lesions (4-5 mm) located on the flexor aspect of the left forearm (Figure 1). One of the lesions advanced progressively. Haemogram revealed an increase in eosinophil to 14% and total leukocyte count was 6.200/mm³. Absolute eosinophil count was increased to 450/mm³. Other haematological and biochemical investigations including stool examination were within normal limits. Based on the history and clinical findings a diagnosis of cutaneous larva migrans was made. He was started with oral albendazole 400mg for 3 days. On follow up after 3 days the lesions showed partial regression (Figure 2). Oral ivermectin 12mg single dose was added for



Figure 1 and 2. *Serpiginous, erythematous and slightly elevated lesions on flexor aspect of left forearm (figure 1). Partial regression after treatment (3 days post treatment) (figure 2)*

faster resolution. The lesions resolved completely in 7 days. Two weeks post treatment there was no recurrence.

Discussion

Cutaneous larva migrans (CLM) is also known as "sand worms", creeping verminous dermatitis, creeping eruption, plumber's itch and duck hunter's itch [2]. Numerous etiological agents can cause creeping eruption like *Ancylostoma caninum* and *A. braziliense*, *Uncinaria stenocephala*, *Gnathostoma* spp., *Dirofilaria conjunctivae*, *Capillaria* spp., etc [1].

The disease is more common in developing countries like India, Brazil and West Indies. It occurs in form of an epidemic or in those who have visited the tropics. It is observed in people who give a history of foreign travel and of walking barefoot on sandy soil or beaches. CLM penetrates intact or exposed skin and migrate through the epidermis.

The most common sites that are affected include dorsum and soles of foot. Other sites that can be affected are buttocks, back and thighs which rest on contaminated sand are susceptible [1]. Unusual sites include the penis, anterior abdominal wall and oral mucosa [3]. The incubation period is few minutes to few weeks after contact from the parasite [4]. Clinically it

presents as linear or serpiginous lesions that progress from 2-3 mm to 2-3 cm per day and are usually associated with pruritus and pain. The diagnosis can easily be made clinically on the basis of typical clinical presentation and in a patient with a history of sunbathing, walking barefoot on the beach, or similar activity in a tropical location. Creeping eruption as a clinical sign is diagnostic [5]. Complications can be caused due to secondary bacterial infection and eczematization [1].

CLM is often misdiagnosed and treated inappropriately. It has to be Cutaneous differentiated from scabies, Erythema chronicum migrans, larva currens, phytophotodermatitis and dermatophyte infection [6]. Laboratory investigations are usually normal with no abnormalities. A skin biopsy is most often non contributory because of migration of larvae through the skin resulting in larvae absence in the large majority of the histopathological specimens [7]. An effective non invasive method not performed routinely for detection and diagnosis of larva migrans is epiluminescence microscopy [8].

It is a self limited disease and the lesions disappear within a period of 2-8 weeks but it may rarely persist for more than 2 years [1]. It is

mainly treated with ivermectin (a single dose of 200 µg/kg body weight) [9]. Another drug that is equally effective is oral albendazole (400 mg a day by mouth for 3 days). Rarely thiabendazole is used orally and topically. The disease can be prevented by use of covered shoes on beaches or any tropical location.

Therefore the above report is a classic case of cutaneous larva migrans following exposure to the parasite on the beach and lesions occurring at an uncommon site.

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