

# A Case Report of Cutaneous Larva Migrans

## *Bir Kutanöz Larva Migrans Olgusu*

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### Abstract

Cutaneous larva migrans (CLM) is a helminthic infection most commonly found in tropical and subtropical geographic areas. However, with the ease and increase of foreign travel by many around the world, CLM is no longer confined to these areas. CLM is an erythematous, serpiginous, cutaneous eruption caused by accidental percutaneous penetration and subsequent migration of larvae. Here, we present a case diagnosed as CLM and treated with Albendazole.

**Key Words:** Helminthic infection, larva migrans, tropical area

### Özet

Kutanöz Larva Migrans Tropik bölgelerde sıklıkla görülen helmintik bir enfeksiyondür. Bununla birlikte ulaşımın ülkeler arasında ulaşımın hızlanmasından dolayı enfeksiyonlarda sadece bu bölgelerle sınırlı kalmamaktadır. Kutanöz Larva Migrans larvanın Perkutan yolla bulaşması ile deride serpingiyöz eritematöz erupsiyonlara neden olabilen bir hastalıktır Burada Albendazolele tedavi edilen bir Kutanöz Larva Migrans olgusunu sunuyoruz.

**Anahtar Kelimeler:** Kutanöz larva migrans, Seyahat enfeksiyonu, Tropikal bölge

### Introduction

Cutaneous larva migrans (CLM) is a helminthic infection most commonly found in tropical and subtropical geographic areas [1]. In particular, CLM is more commonly seen in those who have contact with soil contaminated by cat and dog's hookworm larvae. CLM is an erythematous, serpiginous, pruritic, cutaneous eruption caused by accidental percutaneous penetration and subsequent migration of larvae [1-2]. Here, we describe a case of an Australian tourist who had returned from a trip to the Brazilian Amazon region one week prior to presenting at our clinic with a lesion on her foot. To our knowledge, no dermatologic lesion identified as CLM has been reported in Turkey.

### Case Report

A 27-year-old Australian woman came to our clinic with complaint of a painful, pruritic, erythematous and contagious lesion that appeared three weeks prior on the dorsal surface of the right leg. Her physical and systemic examinations were normal. She had given an account of her recent Brazilian Amazon trip, which was one month ago, during which time she wore sandals.

On examining the skin, we found a 3-4 cm linear, erythematous, serpiginous localized lesion characteristic of a papulonodular tip on the dorsal surface of the right foot (Figure 1). Because of the patient's trip to a tropical area and the clinical findings, we evaluated the patient as a case of CLM. Eosinophilia was not found in the complete blood picture investigation. The peripheral smear was normal, and no Pathology was found in the chest x-ray [3]. We prescribed Albendazole at a dose of 400 mg to be taken once a day; later on, we

observed that the lesions and the patient's complaints had significantly regressed [4].

### Discussion

CLM is the most commonly acquired tropical disease found originally in tropical and subtropical geographic areas such as the southwestern United States, Africa, Middle and South America and Southeast Asia [5]. However, the ease and increase of foreign travel by those around the world have caused CLM to be no longer confined to these areas [6]. Cases were found in cool climate areas, and cases have



**Figure 1.** Linear, erythematous, serpiginous localized lesion on dorsal surface of right foot

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been reported of people who had a recent trip to one of the endemic countries. *Ancylostoma braziliense* is the most common offender. In CLM, the parasite's life cycle begins when eggs are passed from animal feces into warm, moist, sandy soil where the larvae hatch; the larvae of CLM are able to penetrate into the dermis [7, 8].

People most often become infected in contaminated areas by walking barefoot, wearing open-toe shoes, or sitting in tainted soil or sand. Our patient had a similar history. The larvae generally migrate in tunnels made by the larvae between the epidermic layer of the stratum germinativum and stratum corneum. Larvae may be situated 1-2 cm from the penetration site. CLM initially manifests as a local pruritic, erythematous papule. Later on, it becomes a 2-3-mm-wide pinkish, edematous, linear, serpiginous and shapeless lesion. Larvae may migrate 2-5 mm in a day. Old lesions become pale once the skin eruption progresses. Sometimes, purulent discharge may be seen due to a secondary infection. Lesions are typically distributed on the lower distal extremities, including the dorsa of the feet and the interdigital spaces of the toes, but they can also occur in the anogenital region, the buttocks and the hands. Intense pruritus occurs on CLM lesions. In addition, our patient had intense itching. The eruption ends in 2-8 weeks but may extend for 2 years. Systemic complications are rare. Systemic signs include peripheral eosinophilia (Loeffler syndrome), migratory pulmonary infiltrates and increased immunoglobulin E (IgE) levels, but these are rarely seen [9]. Our patient had no eosinophilia or lung involvement.

The diagnosis of hookworm-related CLM is clinically easy to make based on the typical clinical presentation (skin findings), which is a pruritic, serpiginous lesion that advances in a patient with a history of sunbathing, walking barefoot on the beach, or similar activity in a high-risk tropical location. Laboratory findings are non-specific. Transient peripheral eosinophilia may be seen. Biopsy may be done to confirm the diagnosis [10].

We should also consider possible contact dermatitis, bacterial and fungal cutaneous infection and other parasitic diseases in such cases. Clinicians should be aware of the possibility of hookworm-related CLM in patients who had traveled to endemic areas and, in particular, those who had stayed on beaches

**Conflict of interest statement:** The authors declare that they have no conflict of interest to the publication of this article.

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