

Case Report

CUTANEOUS LARVA MIGRANS: A RARE TROPICAL DERMATOSIS

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ABSTRACT

Cutaneous larva migrans (CLM) is a parasitic infection that is especially transmitted from soils contaminated with hook worm originating from cats and dogs, hence lesions are seen in lower extremity. In this report we present a case infected in Sakarya, Turkey; while he walked barefoot in a stream. In cases with foot involvement with serpiginous lesions and not responding to routine treatment, CLM must be considered in differential diagnosis.

Key words: larva, migratory erythema, parasite, skin

ÖZET

Kutanöz larva migrans (KLM), özellikle kedilerden ve köpeklerden kaynaklanan kancalı solucanla kirlenmiş topraklardan bulaşan parazitik bir enfeksiyondur ve bu nedenle lezyonlar alt ekstremitede görülür. Bu yazıda derede yalınayak yürürken Sakarya, Türkiye'de enfekte olmuş bir vaka sunulmaktadır. Serpiginöz lezyonlarla ayak tutulumu olan ve rutin tedaviye cevap vermeyen olgularda ayırıcı tanıda KLM mutlaka düşünülmelidir.

Anahtar kelimeler: larva, migratuvar eritem, parazit, deri

INTRODUCTION

Cutaneous larva migrans (CLM) is a parasitic infection. Especially it is seen in southern USA, Africa, Caribbean, Topical, and Subtropical regions like southeast Asia.¹ The disease is not limited to just these regions, because traveling to these regions is easier nowadays.^{1,2} CLM is especially transmitted from soils contaminated with hook worm originating from cats and dogs. For this reason lesions are seen in lower extremity.¹ Serpiginous

lesions are the result of larvas wandering around and making tunnels in the epidermis. At the same time it develops itching.² Here, CLM case is thought to develop as a result of naked foot contact with moist ground. Tropical dermatoses are rare. This case was diagnosed in our country and we present this case to emphasize the fact that such dermatoses may also be encountered in Turkey.

CASE REPORT

44 year old man applied to outpatient clinic with a complaint of eruption located in his ankle for approximately 6 months. According to his history before the lesions developed, he had walked barefoot in a stream, in Sakarya, Turkey. His feet contacted with ground. He was given topical corticosteroid and topical antibiotic treatments, but didn't get benefit from these drugs. The presented case did not visit a tropical country before the

occurrence of the lesion. There was no family history of similar disease. On dermatologic examination, serpiginous patch nearly 13X5 cm diameter was observed and there was more erythema in the distal part of the lesion in comparison with proximal part. But in distal part of the lesion there was a plaque formed by bullous lesions and it had a serpiginous shape (Figure 1).



Figure 1. Erythematous serpiginous plaque with distally located bullous lesions involving medial malleolar region of the patient.

Based on patient history and clinical signs this case was diagnosed as CLM. There was no pathology detected in his routine

laboratory tests and on his chest X rays. Peroral albendazole 400mg/day together with topical metronidazole twice a day was

managed for three days. Some recovery was seen on 10th day of his treatment. But after 5 months all lesions regressed with

some degree of postinflammatory hyperpigmentation and they did not recur (Figure 2).



Figure 2. All lesions regressed with some degree of post-inflammatory hyperpigmentation 5 months after treatment and they did not recur.

DISCUSSION

CLM is a parasitic skin infection resulting from skin penetration of nematod larvae which are pathogenic for animals. This infection is generally transmitted from soil contaminated with cat and dog-borne hookworm larvae and is contracted via stepping on infected ground.² Therefore, this disease is mainly observed in lower extremity. But rarely this disease involves scalp, genital region, upper extremity and trunk.¹ Travel to some geographic regions that have moist and hot climate or bare

feet contact with infected moist ground like in our case are the risk factors for the development of CLM. The larvae that penetrate through epidermis cannot pass basal membrane because larvae did not possess collagenase enzyme. They can just move within tunnels between stratum corneum and stratum basale.³ These larvae can't complete their development in humans, for this reason a self-limited clinical picture is observed.^{1,2}

During movement of larvae; there are immunologic reactions and as a result of these reactions itching, erythema, and sometimes serpiginous lesions with bullous character are observed.² Diagnosis is based on patient history and clinical signs. Laboratory tests are not specific, but temporary peripheral eosinophilia can be seen.¹ It must be kept in mind that allergic contact dermatitis, fungal skin infections and erythema migrans are differential diagnoses for CLM.^{1,2} Treatment can be organized as per oral ivermectin 200mg (

one dosage) and albendazole daily 400mg dose for 3 days like our case.¹ According to German CLM treatment Guideline recommended albendazole dosage is 800 mg daily for 3 days.² Systemic treatments are contraindicated in pregnant and breast feeding women. Recommended treatments for them are local symptomatic treatments such as topical corticosteroids and topical antibiotic treatment.² In the literature there are some CLM cases that were reported to respond to topical ivermectin treatment.⁴

CONCLUSION

Our aim in reporting this case is to remind the fact that cutaneous larva migrans is a kind of tropical dermatosis that can be seen in Turkey. In cases with foot involvement

with serpiginous lesions and not responding to routine treatment, CLM must be considered in differential diagnosis.

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