

Zosteriform Cutaneous Larva Migrans In a Nontropical Geography: Successful Treatment with Oral Albendazole

Habibullah Aktaş,^{1*} MD, Ali İhsan Guleç,¹ MD, Can Ergin,² MD, Filiz Sürücü,³ MD

Address: ¹Karabük University, Faculty of Medicine, Department of Dermatology, Karabük, ²Dışkapı Yıldırım Beyazıt Education and Research Hospital, Department of Dermatology, Ankara, ³Karabük University, Faculty of Medicine, Department of Infectious diseases, Karabük, Turkey

E-mail: aktashabib@hotmail.com

* Corresponding Author: Dr. Habibullah Aktaş, Bağlarbasi Mah. Akcaoglu Sok.7-6 Safranbolu, Turkey

Published:

J Turk Acad Dermatol 2016; 10 (1): 16101c7

This article is available from: <http://www.jtad.org/2016/1/jtad16101c7.pdf>

Keywords: Cutaneous larva migrans, Albendazole

Abstract

Observation: Cutaneous larva migrans is an erythematous, pruritic, cutaneous eruption caused by accidental percutaneous penetration and subsequent migration of larvae of animal hookworms. It usually appears on feet, legs and buttocks since parasites generally enters the skin via contaminated soil. Although it is a self limiting disease, treatment is necessary for its intense pruritus and risk of secondary bacterial infection.

We report an adult female case with cutaneous larva migrans, who has an usual presentation localized to left submammary area, unilaterally.

Introduction

Cutaneous larva migrans (CLM) is a parasitic skin infection occurred from contamination of animal hookworms [1]. The larvae of parasites penetrate the skin and migrate by opening microtunnels causing severe itching and its characteristic clinical appearance [2]. It is usually diagnosed on the basis of clinical presentation [3]. The lesions of CLM appears as a raised, erythematous, serpiginous eruption usually confined to the skin of the feet, buttocks or rarely abdomen caused by human hookworm [2, 3]. Since contaminated soil and sand are the major source of larvae of parasites, lower extremities and neighbouring areas are mainly involved [2, 3, 4].

Case Report

A 43 year -old female patient applied to dermatology clinic with intense itching and some redness at left submammary area for about two weeks. In dermatological examination, it was observed

that she had a few erythematous, raised, streak-like serpiginous eruptions on her anterolateral aspect of left submammary area which could be likely considered as a zosteriform pattern. No tenderness was felt when palpated. She had no similar lesions on other parts of her body.

In questioning, she had dealt with animal feces (sheep and cows) for cultivation at recent weeks. Laboratory investigation revealed no abnormality including total IgE. We put a diagnosis of CLM in clinical basis. Oral albendazole treatment 400 mg a day for 3 consecutive days was carried out with a topical metranidazole cream. This protocol was reused after one week. Two weeks later, pruritus was gone with some residual hyperpigmentation over initial lesions. One month later from the beginning of therapy, she was seen as complete clearance of lesions remaining slight post-inflammatory hyperpigmentation.

Discussion

Cutaneous larva migrans (CLM) is a pruritic dermatitis seen commonly in tropic and

subtropic countries although it has a worldwide distribution [1,5]. CLM is so rarely diagnosed in our country, Turkey [6].

The larvae which cause CLM infect domestic animals, especially dogs and cats [1,2,4]. The infection is usually acquired by walking barefoot on ground contaminated with animal feces but other parts of body can become infected after contacting contaminated soil or sand [1,2,3,4]. Our patient carried the larvae to her trunk by her hands possibly after contacting animal feces which feces of cats or dogs got mixed.

Patients have intense localized pruritus that begins shortly after the hookworm penetrates the skin [1,2,4,5]. Several days later the pruritus is associated with edematous, serpiginous or herpetiform eruption [2,4,5]. This case had erythematous, serpinigous and streak like pattern described in the literature. Although the mostly encountered locations are lower extremities and buttocks, our patient had atypical localization, her left anterolateral trunk [7,8].

CLM is often misdiagnosed and treated inappropriately [3,4,5]. in particularly non-tropic countries since it is seen so rarely. It has to be differentiated from scabies, erythema chronicum migrans, allergic contact dermatitis and dermatophyte infection. Laboratory investigations are usually normal except eosinophilia and total IgE rise in some cases [2,4,5]. Our patient did no abnormal lab results.

Diagnosis is done on clinical basis because in most cases the parasite cannot be seen in biopsy specimens and histopathological findings are not specific [2,3,5].

Even untreated, the clinical picture spontaneously resolves within 1-3 months, rarely up to 1 year. But intense pruritus and risk of superimposed bacterial infection make a treatment necessary. Generally drug of choice is ivermectin as single dose. Alternative choices are thiabendazole, albendazole

as systemic or topical. Some patients for example pregnant who cannot tolerate or use the mentioned drugs are applied on liquid nitrogen freezing in high success rate [2,3,5,9].

The presented case responded very well to oral albendazole and topical metranidazole treatment resulting in a rapid improving in pruritus in days and, total clearance of skin lesions in weeks. No side effect was observed during treatment period.

The publication of this clinical case is of interest for both so rarely encountering in our country and its unusual zosteriform involvement in relatively wider area. Being familiar to clinical presentation CLM prevents misdiagnosis, loss of time and cost, but provides a rapid patient satisfaction.

References

1. Hochedez P, Caumes E. Hookworm- related cutaneous larva migrans. J Travel Med 2007; 14: 326-333. PMID: 17883464
2. Upendra Y, Mahajan VK, Mehta KS, Chauhan PS, Chander B. Cutaneous larva migrans. Indian J Dermatol Venerol Leprol 2013; 79: 418-419. PMID: 23619447
3. Sardesai VR, Agarwal TD, Dahiya PS. Cutaneous larva migrans. J Pediatr Sci 2014; 6: e207.
4. Brenner MA, Patel MB. Cutaneous larva migrans: the creeping eruption. Cutis 2003; 72: 111-115. PMID: 12953933
5. Bava J, Gongalez LG, Seley CM, Lopez GP, Troncoso A. A case report of cutaneous larva migrans in Argentina. Asian Pac J Trop Biomed 2011; 1: 81-82. PMID: 23569731
6. Yavuzer K, Ak M, Karadag AS. A case report of cutaneous larva migrans. EAJM 2010; 42: 40-41. PMID: 25610118
7. Meotti CD, Plates G, Nogueira LLC et al. Cutaneous larva migrans on scalp: atypical presentation of a common disease. An Bras Dermatol 2014; 89: 332-333. PMID: 24770515
8. Mohanty I, Patnaik S, Mohanty P. An unusual presentation of cutaneous larva migrans in a male child. Indian J Med Microbiol 2012; 30: 486-487. PMID: 23183483
9. Heulkelbach J, Feldmeier H. Epidemiological and clinical characteristics of hookworm- related cutaneous larva migrans. Lancet Infect Dis 2008; 8: 302-309. PMID: 18471775