

Cutaneous Larva Migrans

BHAVANA VENKATA NAGABHUSHANA RAO*, CH VNGR RAMANUJAM†

A 34-year-old male patient came to our clinic with an itchy brownish eruption over the dorsum of the right foot of a week's duration. It originated as a small itchy papule and gradually spread like thread over the dorsum of the foot reaching a length of 25 cm (Fig. 1). He was a dog lover; he owns plenty of pet dogs at home. He participates in Dog shows, he got a "the best dog award" for his German shepherd this year. He had no systemic symptoms; pulse, temperatures and blood pressure were normal. He was given albendazole 400 mg orally for 3 days along with antihistamine fexofenadine for 3 days. Itching subsided in 3 days and eruption in 10 days time. He was advised to deworm his pet dogs regularly.

Cutaneous larva migrans is a dermatological lesion that occurs when humans accidentally get infected by dog or cat hookworms *Ancylostoma braziliense* and *Ancylostoma caninum*. It may also be caused by larvae of other non-human parasites. Creeping eruption is a sign that refers to the erythematous migrating cutaneous thread like serpiginous track that is produced by migration of larvae in the skin. Hookworms that are responsible for these kind of lesions are distributed worldwide, but infections are more common in tropical and subtropical countries. Those who are at risk include travelers, children, swimmers, pet lovers and laborers whose activity bring their skin in contact with contaminated soil. Eggs that are passed out from a dog or cat hatch out rhabditiform larvae in 1 or 2 days. In 5-6 days, they become a filariform larvae. When they come in contact with a definite host i.e., dog they penetrate the skin, enter circulation, reach the lungs and ascend to pharynx. They are then swallowed and reach the intestines. Humans may get infected by this filariform larva, they cannot complete their life cycle in



Figure 1. Cutaneous 25 cm long lesion on the dorsum of the foot.

humans. They creep within the epidermis and produce an inflammatory track along the migration. Rarely pulmonary eosinophilic syndrome can happen either by direct invasion or due to systemic immunological reaction. Cutaneous larva migrans occurs frequently in the lower extremities. It starts as pruritic papule and spreads as an elevated serpiginous track at the rate of several millimeters a day. It is usually 3 mm broad and 15-20 mm in length and the larva is located 2 cm ahead of the lesion. If exposed to highly contaminated soils multiple eruptions may appear at the same time. Strongyloidiasis can also produce similar eruptions, but they progress fast at a rate of 1 cm in 5 minutes, hence is called larva currens (running larva).

Anthelmthic therapy is useful for early resolution of symptoms and prevents secondary infections. Symptoms disappear 1 week after therapy, pruritus earlier than dermatitis. Ivermectin 200 µg/kg as a single dose or albendazole 400 mg once a day for 3 days, usually suffice, but a weeks therapy with albendazole may be warranted in multiple eruptions. Addition of antihistamines will reduce the intensity of itching. Topical thiabendazole or albendazole has also been reported to halt progress of disease and reduce the itching.

*Dept. of Medicine

†Dept. of Surgery

Queen's NRI Hospital, Visakhapatnam, Andhra Pradesh

Address for correspondence

Dr Bhavana Venkata Nagabhushana Rao

Dept. of Medicine

Queen's NRI Hospital, Visakhapatnam - 530 013, Andhra Pradesh

E-mail: bhavanavnrao@gmail.com