

CLINICAL IMAGE**Intradermal Moving Tracks**Wassim M. Jamaledine, MD¹, Saliha Saleem, MD¹, William E. Roland, MD¹

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CASE PRESENTATION

A 64-year-old female presented in August of 2022 to the infectious disease clinic for pruritic lesion and seeing worms on her left foot. Her medical history includes hyperlipidemia, seborrheic keratosis, actinic keratosis and basal cell carcinoma that was excised in 2020. In November 2021 she traveled to Jamaica, where she used to dance barefoot on the sand. Two months into her stay, her symptoms started with itchiness and burning sensation in her left foot. Moreover, when she got back to the U.S. in July 2022, she developed watery diarrhea that resolved on its own. She denies having any other systemic symptoms. She tried using natural

oils and neem powder for the itch. Her symptoms persisted, and she ended up going to a primary care physician who prescribed one course of albendazole. After taking the first dose, her lips swelled, and she felt unwell hence she was referred to the infectious disease clinic. Further history showed that she is a cashier who lives on a farm in Columbia, Missouri. She has cows and a pet dog on her farm where she walks barefoot. Her vital signs were normal. On physical exam she had an erythematous creeping skin lesion with a serpiginous pattern on her left foot (Figure 1).



Figure 1. Lesion on the left foot on the day of presentation to the ID clinic. The image shows erythematous linear serpiginous track.

No other pertinent findings were noted. She was diagnosed with Cutaneous Larva Migrans (CLM) with no further work up, and

she was sent home after receiving one dose of Ivermectin 200 μ g/kg. Follow up after 1 week showed remarkable improvement (Figure 2).



Figure 2. One week after one dose of Ivermectin. Lesion is resolving, the erythema and swelling has significantly decreased. Patient also reports her pruritis improved.

CLM is a parasitic infection contained in the skin. It is caused by the larval stage of nematodes; hookworms are the usual culprit, and common species are *Ancylostoma braziliense*, *Ancylostoma caninum* and *Uncinaria stenocephala*.¹ It is prevalent in warm moist environments in tropical and subtropical areas.² Exposure of bare skin to sand/mud is the main risk factor. The symptoms are caused by the inflammatory reaction to moving larva in the skin. The disease manifests as pruritic, erythematous, linear, serpiginous track¹ that causes sleep disorder in severe cases.² The feet are commonly involved, but lesions can be found

elsewhere on the body.³ The larva resides 1-2cm ahead of the track⁴ and moves 2.7mm per day on average.² CLM is an overlooked disease evidenced by a high percentage of misdiagnosis, up to 55% of cases in certain areas.² Diagnosis is purely clinical, without need for labs or imaging. First line treatment is ivermectin; albendazole is an alternative treatment.¹

Notes

Conflicts of interest: None declared

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