Imported cutaneous larva migrans by a 31-year-old French woman after a travel in Gabon

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DESCRIPTION

A 31-year-old French woman presented with typical cutaneous larva migrans following a 1-week visit to Gabon. Five days after her return to France, a serpiginous skin rash appeared on the anteromedial side of the left thigh (figure 1A). It had progressed for 1 week before consultation, and a contralateral lesion also appeared (figure 1B). Both lesions were itchy. The patient did not report other symptoms, such as asthenia, abdominal pain or intestinal disorder. Clinical examination did not reveal any other abnormalities. Biologically, there was no anaemia, hypereosinophila or liver disorder. Serology was negative for strongyloidiasis and toxocariasis. Single dose 12 mg ivermectin associated with an antihistamine was prescribed. On consultation at 1 month, the cutaneous lesions had totally resolved, without recurrence.

Dog or cat hookworm is the most common cause of cutaneous larva migrans in humans. Endemic in tropical and subtropical countries, including South East Asia, the parasites (Ancylostoma caninum, Ancylostoma braziliense or Uncinaria stenocephala) use canids and felids as natural hosts, growing in the animal's intestine before being excreted into the external environment. Human infection occurs after skin contact with larvae, especially during walking or lying on contaminated beaches. The larvae enter into the dermis or epidermis and migrate subcutaneously. During migration, an itchy erythematous cord develops under the skin,

moving 2–3 cm/day. Since these animal larvae cannot penetrate the basal membrane of human skin, cutaneous larva migrans is a self-limiting disease, as the larvae remain confined to the epidermis (parasitic impasse). Pruritus intensity and symptom duration are variable. The natural history of cutaneous larva migrans is spontaneous resolution without treatment within a few weeks, but most patients referred to the infectious diseases unit receive antiparasite therapy such as albendazole or ivermectin. Ivermectin is the drug of choice, with a single dose of 200 µg per bodyweight. If the treatment fails, a second dose usually provides definitive cure. 12

Learning points

- ► Cutaneous larva migrans is a common reason for medical consultation after travel in the tropics.
- ▶ Dog or cat hookworm is the most common cause of cutaneous larva migrans in humans; larvae enter the epidermis, migrate subcutaneously and remain confined in the epidermis (parasitic impasse).
- ➤ Single-dose ivermectin is the treatment of choice for cutaneous larva migrans.

Contributors TF participated in patient care. RB, CC and TF participated in literature review, and writing and revision of the manuscript

Competing interests None declared.

Patient consent Obtained.

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REFERENCES

- 1 Feldmeier H, Schuster A. Mini review: hookworm-related cutaneous larva migrans. Eur J Clin Microbiol Infect Dis 2012;31:915–18.
- 2 Kincaid L, Klowak M, Klowak S, et al. Management of imported cutaneous larva migrans: a case series and mini-review. *Travel Med Infect Dis* 2015;13:382–7.



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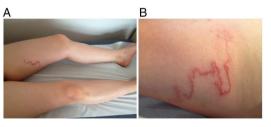


Figure 1 (A) Typical serpiginous erythema of cutaneous larva migrans of the anteromedial side of the left thigh. (B) Identical lesion that occurred a few days later on the anteromedial side of the right thigh.

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