Autochthonous Cutaneous Larva Migrants in France and Europe

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CLINICAL REPORT

Cutaneous larva migrans is a dermatitis, typically acquired in warm tropical or sub-tropical countries, caused by migration of the larvae of nematodes (hookworm; mainly Ankylostoma braziliense and, occasionally, A. caninum or Uncinaria stenocephala), which are parasitic on animals such as cats and dogs, into the patient’s skin. The larvae penetrate the skin after contact with infected soil and cause a typical creeping eruption. Patients with cutaneous larva migrans seen in Europe have usually acquired the disease following a stay in a tropical or sub-tropical area. However, some cases of cutaneous larval migrants are acquired in Europe. We report here 5 autochthonous cases in France and give an overview of European autochthonous cases.

Key words: cutaneous larva migrans; France; Europe; Ancylostoma caninum.

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Patients with CLM in Europe have typically acquired the disease after a stay in a tropical or sub-tropical area. Europe, even Southern Europe, is not an endemic area for CLM; nevertheless, a few cases of autochthonous (locally acquired) CLM have been reported in Europe. We report here 5 autochthonous cases in France and give an overview of the European autochthonous cases of the last 25 years.

CASE REPORTS

Case 1: July 2011
A 30-year-old man presented on 7 August 2015 with a serpiginous track on his back (Fig. 1c) after lying on a sandy beach (locally acquired) CLM have been reported in Europe. We report here 5 autochthonous cases in France and give an overview of the European autochthonous cases of the last 25 years.

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first occurred. He was treated successfully with a single oral dose of 200 μg/kg ivermectin.

Case 4: June 2017

A previously healthy, 12-month-old boy presented on 17 June 2017 with a serpiginous skin track located on the buttock (Fig. 1d). The family had spent the weekend on the border of an artificial lake in the area of Oraison (Alpe-de-Haute-Provence department) on 11 June 2017. The family had not travelled within the previous 2 years. The diagnosis of CLM was clinically made, and the patient was treated successfully with a single oral dose of 200 μg/kg ivermectin.

Case 5: September 2017

A 60-year-old man living near Paris presented in September 2017 with pruritic serpiginous tracks on his back (Fig. 1e). He had not travelled outside France during the previous 2 years. The clinical diagnosis was consistent with CLM. He was treated successfully with a single oral dose of 200 μg/kg ivermectin.

French and western European autochthonous cases

We reviewed all autochthonous CLM reported in France and Europe over the last 25 years (1994–2018) (PubMed search, key words: “larva migrans”, “Europe”, and related references found in articles). A total of 55 cases were found: 15 from Spain (7–16), 13 from France, including ours (17–22), 9 from England/UK (23–30), 8 from Italy (31–33), 7 from Germany (34–37), 2 from Serbia (38), and 1 patient for whom it was not possible to determine whether they were from Spain or Portugal (39). The geographical distribution of the cases in France and Europe is shown in Figs 2 and 3. The number of patients reported each year as listed in the published articles is shown in the histogram in Fig. 4.

DISCUSSION

We report here 5 additional cases of autochthonous CLM in France and the first (3 patients) cases from the Mediterranean coast of France. The French Mediterranean border is characterized by more than 500 km of Mediterranean coastline with many sandy beaches, rivers and lakes. This area has temperate springs and hot summers. Millions of tourists visit each summer to enjoy the Languedoc-Roussillon, Provence and Riviera. In addition to these cases from southern France, other cases were from parts of the country such as the Brittany or Paris areas in the northern part of France, showing that autochthonous CLM is not restricted to the southern and warmest areas of the country. Autochthonous CLM had been reported previously in the early 20th century by Brocq in 1907 (40) and Darier in 1928 (41).

In Europe and France, CLM is usually an imported parasitic skin disease from tropical and overseas countries, but the number of autochthonous cases reported in the last 25 years shows that CLM is, in rare circumstances, a locally acquired disease in northern countries, such as Germany, the UK, or northern France. These observations may change our view of CLM as being typical of tropical diseases and exclusive to the tropics. One question raised by reports of autochthonous CLM in Europe is whether this increase can be ascribed to global warming; however, given the low number of cases reported yearly, it is not currently possible to give a definitive response. An incidence survey is indicated.

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