Clinical Pearls

Migratory myiasis in a European traveller due to Hypoderma larvae

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A 28-year old otherwise healthy Dutch male presented at the emergency department with fatigue, joint complaints and migratory subcutaneous swellings on back, and legs. Moreover, he reported a parasite coming out of the epidermis of his back. Three months previously, he returned from travelling across South America, South and Southeastern Asia and the Caucasus.

At presentation, routine haematological and biochemical investigations were normal, except for high levels of eosinophils (>10∗10⁹/l) and an increased erythrocyte sedimentation rate (highest 76 mm/h). Microscopic examination of faces, routine PCRs and serological tests for ascariasis, fascioliasis, filariasis, paragonimiasis, schistosomiasis, strongyloidiasis, toxocariasis and trichinellosis were negative.

In addition, serological tests for gnathostomiasis returned negative. Therefore, this diagnosis was rejected and albendazole treatment was ceased.

The diagnostic process was challenging due to the large number of possible parasitic infestations characterized by migratory (sub)cutaneous swelling(s). These infestations include fascioliasis, gnathostomiasis, loaiasis, dirofilariasis, mansolelliasis, paragonimiasis and toxocariasis. However, fascioliasis, paragonimiasis...
Hypoderma sinense/Hypoderma lineatum parasite. The adult flies look very similar and their life cycle is identical, but they differ in the host they parasitize: yaks (H. sinense) or (domesticated) cattle (H. lineatum)

and mansolelliasis are characterized by nodular subcutaneous swelling; loaiasis is only seen at the African continent and G. spinigerum larvae cannot mature in humans larger than 3 mm. Sparganosis and dirofilariasis could also be added as possible differential diagnosis typically presenting with subcutaneous migratory swelling(s). However, these infestations were not included in our initial possible differential diagnosis.

Case reports of human infestations with Hypoderma sp., such as H. lineatum and H. sinense are rare, especially in Europe. In 2014, a case report was published, describing a farmer, who had never travelled outside Italy with an infestation by H. lineatum, confirmed by molecular analysis. Puente et al. (2010) reported on a European with an H. sinense infestation, presenting with abdominal pain and, inflammation of the right groin and testicular region after traveling to northern India. Furthermore, a comment was published (2012) about an H. sinense infestation of a German tourist who had developed swellings and pain after traveling to Tibet.

Supplementary data
Supplementary data is available at JTMEDI online.

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**Conflict of interest**
The authors declare that they have no conflict of interest.

**Patient consent**
Written informed consent was obtained from the patient for the publication of the case report.

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