## Clinical picture

## **QJM**

## The undesired fellow traveller

In September 2010, a 37-year-old male was brought to our infectious disease clinic a week after a medical expedition in the Maranhão region of the Amazon rainforest, Brazil.

He reported an insect bite on his right forearm 2 months earlier while he was in the forest, and noticed a furuncle enlarging overtime, becoming swollen and erythematous. Drainage was performed at the base camp and a short course of oral antibiotics was administered for presumed cellulitis. The lesion recurred (Figure 1) and continued to expand with sporadic whitish sero-sanguinous discharge, the patient referring a sense that there was 'something crawling' inside.

After our consultation, incision under local anaesthesia was performed at the dermatologic unit and a live and mobile larva was removed in its entirety (Figure 2) from a small pore on the top of the lesion. It was later identified as *Dermatobia hominis*. The patient is disease free 4 months following surgery.

Myasis is the infestation of live human or vertebrate animals with dipterous (two-winged) maggots that feed on the host dead or living tissue, liquid body-substance, or ingested food.<sup>1</sup> It represents a worldwide phenomenon that is related to the



**Figure 1.** Tender, 2-cm erythematous to violaceous furuncle with surrounding desquamation and centralized punctum draining seropurulent fluid on the medial right forearm.

latitude and the lifecycle of certain species of flies. The flies responsible for the condition prefer the warm and humid environment, the disease being limited to the summer months in temperate zones but occurring all year in the tropics. Despite the presence of many species, *D. hominis* (the human botfly) and *Cordylobia antropophaga*, mainly affect return travellers: *D. hominis* is endemic in the tropical forest and wooded downlands of Central and South America whereas *C. antropophaga* inhabits the sub-Saharian Africa.<sup>2</sup>

Increased travel to exotic destinations has correspondingly increased the number of cases observed in Europe, in fact myasis is actually the fourth most common travel-associated skin disease.<sup>3</sup>





**Figure 2.** The extracted third-stage *D. hominis* larva with characteristic rows of spines and posterior spiracles.

Furuncular myasis is the most encountered clinical form, usually involving head and other exposed areas, characterized by inflamed swelling, sometimes associated with a sensation of movement or pruritus; an opening on the top of the lesion could appear, with seropurulent exudation, the tail of the larva occasionally extruding from this pore. Resistance to common antibiotics has been also frequently reported.

The differential diagnosis should include cellulitis, furunculosis, cutaneous leishmaniasis, sarcoidosis, sebaceous cyst, as well as embedded foreign body.<sup>1</sup>

As physicians are still not familiar with this condition at our latitude, such diagnosis should be considered whenever the history includes venture into potentially endemic regions.

Asphyxiation of the larva through the mechanical occlusion of the opening (using oil, creams or paraffin), 'squeezing' or surgical evacuation are curative, adding antibiotics only with superinfection.<sup>1,2</sup>

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## References

- Robbins K, Khachemoune A. Cutaneous myasis: a review of the common types of myasis. *Int J Dermatol* 2010; 49:1092–8
- 2. Lemon MA, Aeling JL. Furuncular myasis. N Engl J Med 2000; 342:937.
- Cestari TF, Pessato S, Ramos-e-Silva M. Tungiasis and myasis. Clin Dermatol 2007; 25:158–64.