Letters to the Editor

Bot-fly bite

Sir,
Increased foreign travel has exposed many European travellers to 'tropical' diseases with which Western doctors are unfamiliar, but which may nevertheless present in routine clinical practice. We describe such a case, in a patient who had recently returned from a holiday in Belize.

A 37 year old man presented with a one month history of abscesses on his upper arm and back which developed at the site of two insect bites sustained 5 weeks earlier, shortly before his return. The abscesses discharged small amounts of blood-stained pus, from which *Staphylococcus aureus* was cultured. Although his symptoms initially responded to a course of erythromycin, one week before admission he developed increasing pain and swelling and the blood-stained discharge recurred. On examination he had two tender, bluish, indurated subcutaneous lesions 2–3 cm in diameter, each with a central punctum from which a small amount of dark blood-stained fluid could be expressed. The surrounding skin was mildly erythematous, although there was no accompanying leucocytosis.

At operation, each lesion was found to contain a single writhing larva approximately 1.5 × 0.7 cm in size, buried within the subcutaneous fat (Figure 1). These were extracted and the underlying cavities curetted and lightly packed with an iodine-soaked wick: 2 weeks later, the wounds had healed completely. The larvae were subsequently identified as those of the human bot-fly *Dermatobia hominis*, an insect with a fascinating, if somewhat

Figure 1 *Dermatobia hominis* larva (scale 0–2 cm). Ventral aspect, showing mouthparts (left) and tail segment (right).

gruesome, life-cycle. *Dermatobia hominis* is found widely in tropical South and Central America, and like the African Tumbu fly, it is a 'myiasis' fly whose larvae can only survive in the living tissues of a warm-blooded vertebrate.^{1,2} The adult female bot-fly captures a jungle mosquito or other biting insect in flight and glues eggs to the underbelly of her captive prey before releasing it. When the mosquito settles on a human host, bot-fly eggs are deposited on the skin, typically in the region of a small scratch or bruise;³ the maggots which hatch burrow subcutaneously, leaving a narrow tail-segment containing respiratory spiracles exposed to atmospheric air through a small punctum in the skin.⁴ The larvae may remain *in situ* for several months and can result in severe ulceration, often with secondary infection.^{3,5} Once mature, larvae erupt through the hosts' skin and drop to the ground, where the puparium is formed, which finally releases the adult fly.^{1,4}

Surgery is not usually indicated for these parasites. It is enough to immerse the affected part in either oil or water in an attempt to asphyxiate the larva, which can be extracted as it struggles to the skin surface. Other practitioners enlarge the skin opening with mosquito forceps and extrude the larva by applying slight pressure. In the days when horses were a common form of transport in these islands and before insecticides were widely used, the horse bot-flies *Gasterophilus intestinalis*, *G. nasalis* and *G. haemorrhoidalis*, would cause a similar syndrome in man in the United Kingdom, which is well described in medical textbooks published at the end of the last century.

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References

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Primary tuberculous appendicitis

Sir,
Singh *et al.*¹ discussed 17 cases of tuberculosis of the appendix. We would like to report a case of primary tuberculous appendicitis in a Caucasian man confirmed histologically postlaparotomy.