



POSTERS

A GIFT FROM ECUADOR: IMPORTED CUTANEOUS MYIASIS CAUSED BY *DERMATOBIA HOMINIS***D. Tesauri¹, F. Di Cioccio¹, T. Galeotti¹, L. Bianchi¹, K. Hansel¹, L. Stingeni¹, F. Veronesi², I. Moretta²**¹Dermatology Section, Department of Medicine and Surgery, University of Perugia, Italy; ²Department of Veterinary Medicine, University of Perugia, Italy**Keywords:** Cutaneous-Myiasis, Dermatobia-Hominis.

Introduction. *Dermatobia (D.) hominis* (order Diptera, family Oestridae), a species of botfly whose larvae parasitise humans and other primates, is a major cause of myiasis in Central and South America and should be considered in patients returning from the endemic area [1]. The female of *D. hominis* uses other insects as carriers of its eggs, most commonly mosquitoes and zoophilous flies, which subsequently blood-feed on humans or other mammals such as cattle, sheep, dogs, cats, and occasionally equids and birds. The warmth of the host's body triggers larval hatching, allowing the larva to drop onto the skin and penetrate through the bite site. Larval development in the subcutaneous tissue proceeds through three stages and usually takes 4-18 weeks to complete [1]. The typical clinical presentation consists of a nodular skin lesion with a central ulceration, seropurulent discharge, and a whitish, tender, moving mass within the nodule, which is highly suggestive of cutaneous myiasis. Patients frequently report intermittent sharp pain in the affected area, progressive enlargement of the lesion, and a sensation of movement within the skin [2,3]. The aim of this case report is to describe an uncommon clinical localization of this parasitosis in a patient returning to Italy from an endemic region, while discussing the diagnostic process and subsequent therapeutic management.

Materials and Methods. A 30-year-old man was referred to our Dermatology Unit by his general practitioner for evaluation of a cutaneous lesion on the right wrist. His medical history revealed recent travel to Ecuador, where he had spent prolonged periods in tropical rainforest environments without the use of insect repellents or other protective measures. Approximately eight weeks after returning to Italy, the patient noticed the onset of a painful erythematous nodule with a small central opening, associated with a pulsatile movement arising from subcutaneous tissue. The lesion slowly and progressively increased in size in the following 2 months. To manage the lesion and confirm the diagnosis, surgical exploration was performed, revealing a larva extending through the subcutaneous tissue down to the muscle fascia. The larva was extracted alive with surgical forceps, fixed in ethanol, and submitted to the Entomology Laboratory of Perugia University for species identification via stereomicroscopic examination. In addition to surgical remo-

val, oral ivermectin (300 µg/kg in single dose) was administered as adjunctive therapy to minimize the risk of residual or undetected larvae.

Results. Surgical and parasitological findings confirmed the diagnosis of cutaneous myiasis caused by *D. hominis*. Stereomicroscopic examination revealed features characteristic with a second-instar larva of *Dermatobia hominis*. The larva was pyriform, approximately 8 mm in length; the anterior portion was globose and armed with both robust posteriorly directed spines (macrospines) and small spines (microspines). The posterior portion was narrow, attenuated, and devoid of spines, with microspines confined only to the terminal region, where the characteristic posterior spiracles were also visible. Following surgical removal of the larva and adjunctive administration of oral ivermectin, complete eradication was successfully achieved.

Conclusions. Diagnosis of *D. hominis* myiasis is primarily clinical and may be confirmed by parasitological identification of the extracted larva [4]. In the case series by Calvopina M et al [5], limb involvement accounted for 30% of involved sites; however, wrist localization was not specifically reported, suggesting that this presentation in our patient is uncommon. While the most widely used therapeutic approach consists of occlusion of the central punctum to induce larval asphyxiation and spontaneous expulsion, surgical extraction represents the definitive treatment in the absence of spontaneous expulsion [6], as was performed in our patient. In selected cases, antibiotic therapy (such as ceftriaxone associated with debridement) may be indicated exclusively for secondary bacterial superinfections in this context, ceftriaxone is commonly used in association with debridement and removal of necrotic tissue. Ivermectin, an avermectin that acts as a positive allosteric modulator of glutamate-gated chloride channels (GluCl) and gamma-aminobutyric acid (GABA) receptors, induces flaccid paralysis via hyperpolarization of nerve and muscle membranes and represents an adjuvant or an alternative therapeutic option for larval eradication, especially in unusual anatomical presentations or in multiple larval parasitosis [5,7].

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