

Disseminated tungiasis^{*}

Tungíase disseminada

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Abstract: Tungiasis is a zoophilic and anthropophilic infestation caused by *Tunga penetrans*. It is endemic in Latin America and in the Caribbean. It occurs mainly in impoverished communities that have no access to basic sanitation and in individuals that visit contaminated areas. The most common penetration site of this ectoparasite is the periungueal region of the feet. The authors present its disseminated form occurring in a patient inhabiting a rural area.

Keywords: Basic sanitation; Communicable diseases; Ectoparasitic infestations; Siphonaptera

Resumo: A tungíase é uma infestação zooantropofílica causada pela *Tunga penetrans*. É endêmica na América Latina e no Caribe. Ocorre, principalmente, em comunidades carentes e sem saneamento básico e em indivíduos que visitam áreas contaminadas. O local mais comum de penetração do ectoparasita é a região periungueal dos pés. Os autores mostram a ocorrência de uma forma disseminada num habitante da zona rural.

Palavras-chave: Doenças transmissíveis; Ectoparasitoses; Sifonápteros; Saneamento básico

Tungiasis is a zooanthropophylic infestation caused by infection by the gravid female of the *Tunga penetrans* flea, a hematophagous ectoparasite that inhabits dry, sandy soil and spreads principally during the dry season (Figure 1).¹⁻³ Maturation occurs between 8 and 12 days and the enlarged abdomen of the flea can contain as many as 200 eggs or more. It is endemic in Latin America, the Caribbean and sub-Saharan Africa.⁴ Trade and military routes spread the disease and cases exist in travelers to endemic areas.^{5,6} The flea's burrowing ability favors penetration of the periungueal region of the feet and occasionally the hands, elbows, thighs, face, buttocks and inguinal region (Figure 2).⁶⁻⁸ After penetration the site becomes inflamed and painful (Figures 3 and 4). Secondary infection may occur in the absence of treatment. Tetanus is a



FIGURE 1: Male patient, 42 years-old, mulatto, from Hortlândia, São Paulo, with papular-nodular lesions showing black dots in the center, measuring between 5 and 8 mm in diameter, in the periungueal, lateral and ventral sides of the toes and plantar areas of the feet. Enucleation was performed in some lesions with a sterile needle and a single dose of ivermectin 200mcg/kg was prescribed

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FIGURE 2: Periungual lesions on the left foot



FIGURE 4: Detail of the lesions in the left plantar region



FIGURE 3: Honeycombed appearance of the right plantar region

common complication. The disease is more prevalent in poor communities with no paved streets, where people walk barefoot.^{1,8-10} The diagnosis is clinical and treatment consists of removing the flea with a sterile needle. □

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