**TITLE**: DERMATOPHYTOSIS IN MANAUS: UPDATES ON THE EPIDEMIOLOGY AND INVESTIGATION OF SOURCES OF INFECTION

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## **ABSTRACT:**

Dermatophytes are fungi with the ability to invade keratinized tissues, especially mammals, causing a skin infection called dermatophytosis, which is common all over the world, and of great importance to public health. The present work aims to contribute to the knowledge of dermatophytoses existing in Manaus and diagnosed in the Fundação de Medicina Tropical Dr. Heitor Vieira Dourado, in the period of 12 months (2015 to 2016). The analysis of dermatophytosis cases was possible through the application of questionnaires to patients with suspected dermatophytosis lesions, and after positive confirmation of the cases (direct microscopic examination and culture), home visits were made to collect domestic dust, soil from external area and domestic animals' hair. A total of 202 questionnaires (66.3% female and 33.7% male, from 1 to 64 year-old) were applied with 32 positive cases for dermatophytosis confirmed. Among the positive cases, it was possible to verify the Trichophyton rubrum species as the most frequent (46.9%), presenting multiple lesions. Cases with multiple lesions are common when dermatophytosis is caused by this species that is anthropophilic and cosmopolitan. The T. tonsurans and Microsporum canis species had similar frequencies in this study (15.6%), and the less frequent was T. mentagrophytes (12.5%), M. gypseum (6.1%) and T. verrucosum (3 %). In the patients' reports, it was verified that the demand for the specialized service is made after months of the appearance of the lesion, or when it became more evident or caused injuries in another anatomical site and when there was a recurrence. Of the 32 positive patients, 4 had no residence in Manaus, and the domestic visit was not possible. Among residents in Manaus, 9 were visited, where it was possible to collect 25 samples, 8 of which were positive for dermatophytes, 6 of cat hair (5 M. canis and 1 *M. gypseum*), 1 soil (*M. gypseum*) and 1 domestic dust (*M. canis*). Dermatophytes found to cause dermatophytosis in patients differ from those found in home visits. This indicate asymptomatic cases in animals and shows that there are sources of infection for new cases of dermatophytoses in humans.

Keywords: Dermatophytoses; Epidemiology; Sources of Infection

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