

**TITLE:** TROPICAL SUBCUTANEOUS MYCOSES: OCCURRENCE AND GEOGRAPHIC DISTRIBUTION IN THE AMAZONAS STATE

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Most of the subcutaneous mycoses occurs in tropical regions and mainly affects rural workers. These infections are usually caused by accidental inoculation of fungal propagules present in plant material or soil, and cause chronic and relapsing clinical conditions that are difficult to diagnose and treat. This is a 13-year retrospective study of the epidemiological aspects of subcutaneous mycoses diagnosed at a tertiary referral hospital in tropical dermatology in the Amazonas State. A survey of 356 medical records of patients with clinical suspicion of subcutaneous mycoses was carried out, of which 75.8% were male and 24.2% were female. The most common age group was 51 to 61 years old (22%) and the most reported occupation was rural work. Only 160 of the suspected cases were confirmed by mycological and histopathological analysis. Lacaziosis was diagnosed in 53.13% of the cases, followed by chromoblastomycosis (CBM) (37.5%), eumycetoma (5.63%), phaeohyphomycosis (1.86%) and actinomycetoma (1.25%). Interestingly, a single case of non-autochthonous sporotrichosis was confirmed (0.63%). The present study is part of an ongoing project, however, the results obtained so far allowed to demonstrate the geographic distribution of the autochthonous cases of the main subcutaneous mycoses in Amazonas, through maps, for the first time. Despite the wide distribution of these mycoses throughout the State, lacaziosis was mainly detected in Southwest while CBM was mainly detected in Northeast region of the Amazonas State. Male individuals are the most affected by these infections since they are in greater exposure to etiological agents due to their occupations, like farm work, hunting and fishing in endemic areas. A rare case of lacaziosis and chromoblastomycosis co-infection was diagnosed in one patient, and in another rare case, a co-infection with chromoblastomycosis and hyalohyphomycosis was diagnosed. *F. pedrosoi* was the main etiological agent of chromoblastomycosis, whereas *R. aquaspersa* was isolated in only two patients with this infection. Subcutaneous mycoses are often neglected and not notified, in addition, data related to their epidemiology are still scarce. Epidemiological studies are needed to identify the environmental factors associated with the occurrence of subcutaneous mycoses. This research allowed to fill in some missing information in the scientific literature on tropical subcutaneous mycoses in Amazonas.

**Keywords:** Subcutaneous Mycoses; Lacaziosis; Chromoblastomycosis; Epidemiology

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