

ISOLATION OF FUNGAL SPECIES FROM SKIN, HAIR AND NAIL FROM HIV/AIDS PATIENTS IN A TEACHING HOSPITAL IN UBERABA, MINAS GERAIS STATE, BRAZIL

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Abstract

Dermatophytes are infections of the skin, nails, and hair mainly caused by dermatophytes species and less commonly by yeasts and other mold species. These infections affect approximately 20% to 25% of people worldwide. Their epidemiology may vary according to lifestyle, environmental and socioeconomic conditions. Different body sites may be affected and the most common cutaneous infection is tinea pedis followed by onychomycosis and tinea corporis. Patients with Human Immunodeficiency Virus (HIV) may be more susceptible to several fungal infections including dermatophytes, which can present a wide spectrum of clinical manifestations. The aim of this study was to evaluate the frequency and distribution of dermatophytes species obtained from skin, nails or hair of HIV/AIDS patients at the Teaching Hospital in Uberaba, Minas Gerais State, Brazil. The study evaluated 200 HIV infected patients, from August 2014 to May 2015. Samples of skin, hair and nail were collected from patients with clinical suspicion of tinea. If there were no lesions, only nail samples were randomly obtained. Of 200 patients, 119 (59.5%) were male and the mean age was 44.7 years. The mean of CD₄ cell count was 512 cells/mm³. Ninety nine (49.5%) of them had suspicious lesions of which 62 (62.6%) cultures were positive for fungi. Some of them showed growth of more than one species. Onychomycosis was the most common clinical presentation whereas toenails were the most frequently affected sites. Dermatophytes spp. represented 24% of fungal isolates and showed the following distribution: *Trichophyton rubrum* 20%, *Trichophyton mentagrophytes* 46.6%, *Trichophyton schoenleinii* 6.6%, *Trichophyton violaceum* 6.6%, *Trichophyton* sp. 13.3%, *Microsporum rivalieri* 6.6%. Moreover *Candida* spp. were obtained in 7.5% of patients and molds in 43.5% of cases. The finding of 24% of dermatophytes spp. from HIV infected patients is in accordance with other reports. Despite the low number of positive cultures, it was observed the predominance of *Trichophyton mentagrophytes* on these isolates, differing from most studies which have been shown *Trichophyton rubrum* as the predominant species.

Keywords: Dermatophytes, epidemiology, HIV/AIDS patients

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