

FIRST CASE OF HUMAN INFECTION BY *TRICHOPHYTON VANBREUSEGHEMII* IN BRAZIL

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SUMMARY

This paper reports the first case of human infection caused by *Trichophyton vanbreuseghemii* in Brazil.

KEYWORDS: *Trichophyton vanbreuseghemii*.; Dermatophytosis

INTRODUCTION

The spectrum of human dermatophytoses have been demonstrated a natural evolution from geophilic dermatophytes to association with or invasion of cornified substrate of animals and man⁶. This evolutionary development is represented by an adaptation in host-parasite relationship, that have explained the dynamic changes in species frequency among the dermatophytes and inclusion of new species in the spectrum of human dermatophytoses³. This study reports the first case of human infection caused by the geophilic dermatophyte *Trichophyton vanbreuseghemii* in Brazil.

CASE REPORT

A 22-year-old white male student, born and living in Cachoeira do Sul, in the central region of Rio Grande do Sul, Brazil, came to the Mycology laboratory of the Santa Maria University Hospital reporting that about two weeks previously an annular lesion with advancing scaly erythematous borders and clear center had appeared on the internal side of his left thigh. The origin of the infection could not be traced and the patient was treated

with topical miconazole, with resolution of the lesion after two weeks. Before the treatment scrapings collected from the active border of the lesion examined in 10% potassium hydroxide mount revealed typical hyphae of a dermatophyte. The rest of scrapings were cultured on Mycobiotic agar (Difco) incubated at 25°C. Colonies grow rapidly and were velvety, with a fine granular heaped center and a flat fringed edges; they were buff with a redbrownish reverse (Fig. 1). Microscopic examination revealed stubby round microconidia, broadly stated to the hyphae, 1.5 to 2.5 x 2 to 3 µm in size, with broad attachment scar and thin walled cylindrical, four to eight cells macroconidia 7 to 8 x 30 to 45 µm in size. They were clustered and break apart, disjointed the cells (Fig. 2). Chlamidoconidia were also seen.

DISCUSSION

T. vanbreuseghemii is a geophilic dermatophyte isolated from Tunisia soil and described as a new species by RIOUX et al.⁵ in 1964. Its teleomorph stage *Arthroderma gertleri* was described by BOHME¹ in 1967. Although it has now been found to be of

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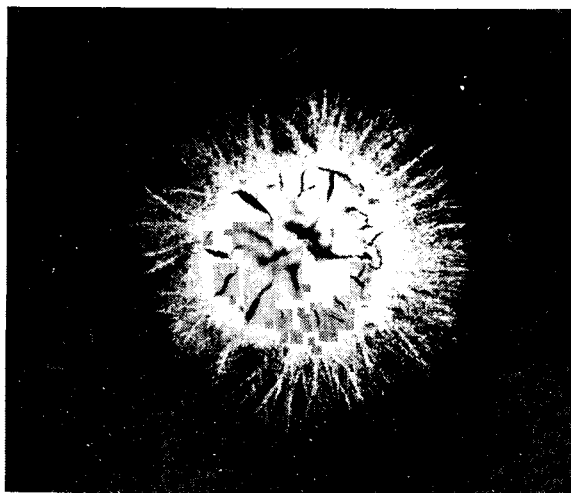


FIGURE 1 - *T. vanbreuseghemii*: colonic on Sabouraud's dextrose agar after two months at 25°C.

worldwidedistributioninsoils⁶, the unique reference on human infection by *T. vanbreuseghemii* was found in HOWARD², referring to REBELL & TAPLIN⁴. Thence it follows that is the first report in Brazil and possibly the second in the world on human infection caused by *T. vanbreuseghemii*.

RESUMO

Primeiro caso de infecção humana por *Trichophyton vanbreuseghemii* no Brasil

É relatado o primeiro caso de infecção humana por *Trichophyton vanbreuseghemii* no Brasil

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FIGURE 2 - *T. vanbreuseghemii* slide culture: stubby round microconidia broadly stated to the hyphae and cylindrical clustered disjunct macroconidia. x 630.

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