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Tinea Cruris due to Combined Infections of *Trichophyton mentagrophytes* and *Microsporum canis*. A Case Report

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Sir,

Superficial fungal infections are usually caused by a single pathogen. Mixed infections with more than one fungus are possible in a small proportion of patients. However, mixed infections due to different dermatophyte species are rare. We present here a case of tinea cruris caused by mixed infections of *Trichophyton (T.) mentagrophytes* and *Microsporum (M.) canis* in an otherwise healthy man.

CASE REPORT

A 66-year-old man presented with a 5-month history of tinea cruris. Physical examination revealed round, marginate, erythematous scaling patches on the buttocks and groin. He had no history of animal contact or other underlying disease. Direct mycologic examination of skin scrapes in 20% KOH showed a large number of branching hyphae of regular width. Cultures in Sabouraud dextrose agar showed growths of two dermatophytes, *M. canis* and *T. mentagrophytes* var. *mentagrophytes*. Culture in potato dextrose agar with chloramphenicol with or without cycloheximide showed growths of *T. mentagrophytes* and *M. canis*. The patient was treated with isoconazole cream for 2 weeks and showed clinical cure.

DISCUSSION

The frequency of mixed infections is uncertain in onychomycosis. In one recent study, mixed infections were reported to be infrequent and comprising only about 5% of onychomycosis cases (1). The most common combination was *T. rubrum* and *Candida* species, and a single case with mixed infections of *T. mentagrophytes* and *Trichophyton* species was described in this study. Data on mixed infections are lacking in other superficial fungal infections, although infection with single fungal pathogen is likely in most cases (2). Combined

infections of different dermatophyte species seem to be an extremely rare event. An unusual infection with *T. mentagrophytes* and *M. canis* was described in a patient with AIDS (3). A few cases of mixed fungal infections have been reported in immunocompromised hosts (2, 4–6). The majority of combined infections reported have been combinations of aspergillus and candidiasis, and other forms included aspergillosis in combination with zygomycosis. The diseases showed an aggressive course with locally invasive or systemic infections.

In our case, two different dermatophytes were isolated from the localized skin lesion of an otherwise healthy patient, and the infection showed a prompt therapeutic response to conventional antifungal agents. It is suggested that mixed infections of different dermatophytes occur rarely in an immunocompetent host.

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