Malassezia furfur onychomycosis in an immunosuppressed liver transplant recipient

Sir,

It has been asserted that Malassezia spp. may be associated with seborrheic dermatitis, pityriasis versicolor, atopic dermatitis, psoriasis and confluent and reticular papillomatosis. It is debatable whether Malassezia spp. is a real onychomycosis agent or a colonizer. In the literature, there are limited number of reports of onychomycosis cases in which Malassezia spp. is claimed as the agent. Malassezia furfur (M. furfur) isolated in toe nails of a liver transplant patient is presented here.

A 55 year-old male patient consulted us with a complaint of thickness in his toe nails for three months. The patient had had no previous onychomycosis treatment. He was undergoing therapy with multiple immunosuppressive agents for a liver transplant that he had undergone a year ago because of Hepatitis B virus (HBV)-related liver cirrhosis. In the examination of the toe nails, distal-lateral subungual hyperkeratosis and brown discoloration were detected in all of his toe nails. Periungual skin was normal [Figure 1]. His skin and finger nails were normal.

Alcohol was used to remove the normal flora before the nail scrapings were taken. A cluster of yeast cells and short irregular hyphae were observed in the direct microscopic examination. They were incubated in Sabouraud and modified Dixon agar at 31°C for two weeks. The colonies that were grown showed round and spherical spore groups and short hyphae [Figure 2]. They were also incubated in Tween 20-80. The organism, Malassezia furfur was identified by its morphological features and physiological tests, including...
Although most of the cases of onychomycosis are caused by dermatophytes, there have been several literature reports of patients with onychomycosis from whom Malassezia has been isolated. Yeasts lack keratolytic ability and do not normally colonize nails, as they are not a good source of lipids. There are conflicting reports as to whether Malassezia is a real pathogenic agent.

Chowdhary et al., isolated Malassezia furfur from the nail scrapings obtained from the nail lesions of distal and lateral onycholysis with subungual hyperkeratosis on the hands and feet of a 13 year-old male patient. Crespo-Erchiga et al., asserted that they encountered Malassezia spp. with Candida spp. as subungual flora elements. Thus, because of its low incidence in the subungual debris, they contested the claim that Malassezia is a true agent in onychomycosis.

Existence of Malassezia in the subungual debris is important, particularly because it serves as a source of systemic infections in intensive care units and is contagious. It is therefore imperative that patients who receive immunosuppressive therapy should be carefully evaluated for their initial nail findings and subsequent, direct examination and culture of the nails.

In our case, neither dermatophytic nor nondermatophytic mold invasion was detected in foot nail scraping samples. We assume that M. furfur was the etiological agent in our case because no other agent grew in culture.

Ilgen Ertam, Derya Aytimur, Sibel Alper
Department of Dermatology, Ege University Medical Faculty, Izmir/Turkey

Address for correspondence: Dr. Ilgen Ertam, Ege University Medical Faculty Department of Dermatology, 35040 Bornova-Izmir, Turkey. E-mail: iertam@mail.ege.edu.tr

REFERENCES