Alternaria infections: laboratory diagnosis and relevant clinical features

F. J. Pastor and J. Guarro

Unitat de Microbiologia, Facultat de Medicina i Ciències de la Salut, Universitat Rovira i Virgili, Reus, Spain Corresponding author and reprint requests: F. J. Pastor, Unitat de Microbiologia, Facultat de Medicina, Universitat Rovira i Virgili, Carrer Sant Llorenç, 21.43201 Reus, Spain E-mail: franciscojavier.pastor@urv.cat

ABSTRACT

The genus *Alternaria* contains several species of melanized hyphomycetes that cause opportunistic human infections. The published literature contains 210 reported cases of human alternarioses between 1933 and the present day. The most frequent clinical manifestations are cutaneous and subcutaneous infections (74.3%), followed by oculomycosis (9.5%), invasive and non-invasive rhinosinusitis (8.1%) and onychomycosis (8.1%). Immunosuppression is frequently associated with cutaneous and subcutaneous infections and rhinosinusitis. The most important risk factors for cutaneous and subcutaneous infections are solid organ transplantation and Cushing's syndrome, and those for rhinosinusitis are bone marrow transplants. Having been exposed to soil and garbage is common in all cases of oculomycosis, with corticotherapy being a risk factor in 50% of these cases. Previous contact with soil and/or trauma to the nails is associated with most cases of onychomycosis. In general, alternariosis shows a good response to conventional antifungal drugs. On some occasions, steroid suppression or reduction is sufficient to resolve an infection. Itraconazole is the antifungal drug used most frequently to successfully treat onychomycosis and cutaneous and subcutaneous infections. Posaconazole and voriconazole are promising therapeutic options, with the latter being especially so for oculomycosis.

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