We report a case of disseminated fatal Talaromyces (Penicillium) marneffei infection in an HIV-infected, antiretroviral treatment-experienced South African woman who had travelled to mainland China. The 37-year-old woman was admitted to a private hospital in fulminant septic shock and died within 12 h of admission. Intracellular yeast-like bodies were observed on the peripheral blood smear. A serum cryptococcal antigen test was negative. Blood cultures flagged positive after 2 days; on direct microscopy, yeast-like bodies were observed and a thermally dimorphic fungus, confirmed as T. marneffei, was cultured after 5 days. The clinical features of HIV-associated disseminated penicilliosis overlap with those of tuberculosis and endemic deep fungal infections. In the southern African context, where systemic opportunistic fungal infections such as cryptococcosis are more common among HIV-infected patients with a CD4+ count of <100 cells/µL, this infection is not likely to be considered in the differential diagnosis unless a travel history is obtained.

1 National Institute for Communicable Diseases (Centre for Opportunistic, Tropical and Hospital Infections), National Health Laboratory Service, Johannesburg, South Africa
2 School of Pathology, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa
3 Ampath National Reference Laboratory, Pretoria, South Africa

Corresponding author: N P Govender (neleshg@nicd.ac.za)
involvement, lymphadenopathy and hepatosplenomegaly are most commonly reported.\[3\] It is possible that this patient developed an immune reconstitution inflammatory syndrome related to penicilliosis following ART initiation, though this cannot be confirmed.\[4\] In the southern African context, where systemic opportunistic fungal infections such as cryptococcosis are far more common among HIV-infected patients with a CD4+ count <100 cells/µL, this infection is not likely to be considered in the differential diagnosis unless a travel history is obtained.\[5\] This is particularly important in cases where fluconazole is selected as an empiric antifungal agent instead of broader-spectrum agents such as amphotericin B or itraconazole.\[6\] We are aware of only one previously diagnosed case of penicilliosis in SA (personal communication with M du Plooy). Hazard Group 3 fungal pathogens such as \textit{T. marneffei} should also be handled with great care in diagnostic laboratories.

Fig. 1. Mould phase of \textit{Talaromyces (Penicillium) marneffei} on Sabouraud agar (A), and yeast phase of \textit{Talaromyces (Penicillium) marneffei} on brain-heart infusion agar (pale-cream mucoid colonies) (B).

References


