Invasive fungal infections, other than Candida and Cryptococcus, from 2008 to 2011, at Tygerberg Hospital in the Western Cape, South Africa

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**Background:** In recent years, the worldwide incidence of mycoses causing severe and life threatening disease has escalated. The growing number of immunocompromised individuals (diabetes, HIV, immunosuppressive therapy and advanced age) have led to an increasing population at risk for invasive fungal infections. An estimated 5.6 million people in South Africa are living with HIV infection and are potentially at increased risk for severe infection. Due to a lack of local data, we aimed to describe invasive fungal infections, apart from Candida and Cryptococcus, in our region and comment on the role of HIV infection.

**Methods:** Positive fungal cultures isolated at the National Health Laboratory Service at Tygerberg Hospital between 2008 and 2011 were reviewed. From 99 positive cultures, we included 13 cases of severe invasive fungal disease after excluding Candida and Cryptococcus.

**Results:** We identified 4 cases of *Sporothrix schenckii*, 3 cases of *Emmonsia* spp., 2 cases of *Histoplasma capsulatum*, 2 cases of *Mucor* spp. and one case of *Blastomyces* spp. and *Aspergillus fumigatus* each. The majority of cases were male with an average age of 38 years. A diagnosis was confirmed on culture from deep tissue biopsy in 11 patients, of which 6 were from skin biopsies. Seven patients had HIV infection, with a median CD4 count of 10 cells/mm³. Two were diabetic and three were on immunosuppressive therapy. None of the patients were severely neutropenic. The patient infected with *Blastomyces* spp had no identifiable risk factor for invasive fungal disease.

**Conclusion:** HIV with severe immunosuppression (CD4 < 50 cells/mm³) is an important risk factor for the development of invasive fungal infections in our region. *Sporothrix schenckii* was the most common isolate, all four cases presenting with disseminated skin disease. Surprisingly, *Emmonsia* spp. was the second most common species isolated and appear to be an emerging human pathogen in the region. We only isolated one *Aspergillus fumigates*, contrary to the fact that it is becoming more common elsewhere in the world. Skin lesions were important clinical clues to severe infection in our cohort and presented an opportunity for limited-invasive tissue biopsy with good diagnostic yields.