

Management of Invasive Fungal Infections

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Summary

Invasive fungal infections cause significant morbidity and mortality in immunosuppressed patients. While incidence of *C. albicans* infections has been decreasing in neutropenic cancer patients and non-*albicans Candida* are on rise; invasive candidiasis has become a significant problem in patients residing in the ICU. Several predictive scores have been developed to diagnose these infections early since any delay in therapy may increase the mortality.

Mortality due to invasive aspergillosis in neutropenic cancer patients and in those undergoing haematopoietic stem cell transplantation has decreased during the last 3-5 years. This is mainly due to newer antifungals such as voriconazole and better management strategies. Prophylactic, empirical and preemptive management strategies are critical and new diagnostic tools (e.g. high-resolution CT scan, serum galactomannan and beta-glucan levels) may lead to early diagnosis.

Non-aspergillus mold infections have gained importance during the last decade and their incidence has steadily been increasing. Mortality due to these fungal infections are higher than invasive aspergillosis and delayed diagnosis and therapy may increase the rate of mortality.

Despite the fact that we have witnessed a significant improvement in both diagnostic and therapeutic modalities of invasive fungal infections, there are still many unanswered questions for better diagnostic and management strategies.

Recommended reading

- 1) Sahin GO, Akova M. Treatment of invasive infections due to rare or emerging yeasts and moulds. *Expert Opin Pharmacother.* 2006;7:1181-90.
- 2) Leon C, et al. A bedside scoring system ("Candida score") for early antifungal treatment in nonneutropenic critically ill patients with *Candida* colonization. *Crit Care Med* 2006;34:730-7
- 3) Walsh TJ, et al. Treatment of aspergillosis: Clinical Practice Guidelines of The Infectious Diseases Society of America. *Clin Infect Dis* 2008;46:327-60.
- 4) Del Bono V, et al. Invasive aspergillosis: diagnosis, prophylaxis and treatment. *Current Opinion Hematol* 2008;15:586-93.
- 5) Pappas GP, et al. Clinical Practice Guidelines for the Management of Candidiasis: 2009 Update by the Infectious Diseases Society of America. *Clin Infect Dis* 2009;48:503-35.
- 6) Spellberg B, et al. Recent Advances in the Management of Mucormycosis: From Bench to Bedside. *Clin Infect Dis* 2009; 48:1743-51.