Changing patterns and antifungal resistance in nosocomial fungal infections

Sadegh Khodavaisy, Sassan Rezaie

Department of Medical Mycology and Parasitology, Tehran University of Medical Science, Tehran, Iran

Fungal infections are increasingly common in the nosocomial setting. The predominant nosocomial fungal pathogens include Candida spp., Aspergillus spp., Mucorales, Fusarium spp., and other molds. The increase in these infections is accompanied by a significant high mortality and prolonged hospitalization. Genotyping methods showed the similarity between colonizing and infecting strains, thus making endogenous origin likely, though exogenous sources like total parenteral nutrition also have been described. Health care workers (HCWs) play an important role in the transmission of fungi. Early initiation of effective antifungal therapy and reversal of underlying host defects remain the cornerstones of treatment for nosocomial fungal infections. However, management of nosocomial fungal infections can be challenging. The intrinsic resistance to antifungal therapy observed in some genera, along with the development of resistance during treatment in others, is becoming a major problem in the management of these diseases. In recent years, new antifungal agents have become available, resulting in a change in standard of care for many of these infections. Nevertheless, the mortality of nosocomial fungal infections remains high, and new therapeutic and preventative strategies are needed.

Keywords: nosocomial, fungal infections, antifungal resistance