

Short Communication

Effect of Amphotericin B and Fluconazole on hospital wards fungi

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Abstract

Background and Objective: Nosocomial fungal infections have considerably increased due to increasing of immunocompromised diseases. This study was done to evaluate the antifungal activity of Amphotericin B and Fluconazole on hospital wards fungi.

Methods: In this descriptive - analytic study, 33 fungal samples isolated from Imam Khomini hospital in Tehran, Iran during 2013. Samples were identified using slide culture method. Serial dilution of drugs and fungal suspensions were supplied from 0.25-128 µg/ml and range 0.5–5×10⁵ cfu/ml, respectively. Minimum inhibitory concentration (MIC) was determined in accordance with NCCLS M38-p guideline.

Results: The most frequent isolated fungus was *Aspergillus spp.* with 39.4% while the low frequent were *Alternaria Spp.* and *Circinella* with similar frequency (3%). MIC range for Fluconazole and Amphotericin B were 64-128 µg/ml and 16-64 µg/ml, respectively. Amphotericin B showed a MIC significant reduction in comparison with Fluconazole (P<0.05).

Conclusion: Hospital wards fungi were resistant to Amphotericin B and Fluconazole.

Keywords: Fungus, Amphotericin B, Fluconazole, MIC, Hospital

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