P978

Abstract (poster session)

**Species distribution and in vitro antifungal susceptibility profile of invasive fungal isolates from a Portuguese multicentre prospective survey**

I. Faria-Ramos, J. Maia, J. Santos-Antunes, J. Melo Cristino, V. Lopes, J. Teixeira, H. Ramos, C. Toscano, T. Marques, Z. Videira, A.M. Almeida, E. Tiza, G. Gonçalves, A. Alves, A. Estrada, C. Lameiras, H. Oliveira, E. Ramalheira, S. Ferreira, A.G. Rodrigues, C. Pina-Vaz* (Porto, Lisbon, Braga, Coimbra, Aveiro, PT)

Objectives: A multicentre prospective and observational study aiming to provide an overview concerning species distribution and susceptibility profile of isolates from invasive yeast infections (IYI). All Hospitals across Portugal were invited to participate during a twelve-month period. Methods: Ten hospitals (from northern, central and southern regions of Portugal) have contributed, by collecting all yeast isolates from sterile biological products and answering a questionnaire concerning its respective patient clinical and demographic data. All isolates were identified using Vitek2 (BioMérieux) identification cards. Molecular identification of cryptic species of C. parapsilosis complex and C. glabrata complex was furthermore performed. The susceptibility profile of each isolate, considering eight of the most frequently used antifungals (Fluconazole, Voriconazole, Posaconazole, Anidulafungin, Caspofungin, Micafungin, 5-Flucytosine and Amphotericin B), was determined according to the CLSI M27-A3 protocol. Statistical analysis was performed to evaluate the distribution and significance of the recovered data. Results: From the three hundred and fifty six isolates, fifteen different species were found. C. albicans was the most prevalent, corresponding to 40% of the IYI episodes; 60% of the remaining cases corresponded to non-albicans infections, in agreement with worldwide tendency for an increasing prevalence of other species than C. albicans. Most isolates were recovered from blood cultures (77%) and from patients admitted at Surgery Department and at Intensive Care Units (35% and 33%, respectively). Most patients aged from 41 to 60 years old and 65% of the patients were male. Overall, susceptibility profile results showed that nearly ten percent of isolates were resistant but the majority remain susceptible to the eight tested antifungals. Resistance rates were higher for echinocandins (18%, 17.5% and 13% for Caspofungin, Anidulafungin and Micafungin, respectively) while azoles appear to be comparatively more effective (11.5% to Fluconazole, 7.6% to Voriconazole and 6.2% to Posaconazole). Almost 100% of the isolates were susceptible to 5-Flucytosine and Amphotericin B. Conclusion: Studies regarding species distribution and isolate susceptibility profile from IYI are extremely valuable, although rare in Portugal, since they provide very important clues towards a more targeted clinical management of IYI. This work was supported by Pfizer Inc. Grant: WS759839.