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Abstract (poster session)

Susceptibility profile of deep-seated yeasts isolates from a university hospital in the northern region of Portugal

I. Faria-Ramos*, J. Santos-Antunes, S. Costa-de-Oliveira, A.G. Rodrigues, C. Pina-Vaz (Porto, PT)

Objectives: An observational study was conducted at the biggest hospital in Portugal, aiming to evaluate the susceptibility profile of yeasts isolated from invasive fungal infections and relevant epidemiological data. **Methods:** Between September 2010 and 2011, all yeasts isolated from invasive fungal infections admitted at the university hospital S. João, in Porto, were collected. All strains were identified using Vitek2 system and the antifungal susceptibility profile was determined according to CLSI M27-A3 protocol regarding 8 antifungals. Clinical and demographic data were registered. Mortality attributed to fungal infections was calculated. Chi-square test and multivariable logistic regression were used to analyze data. **Results:** The incidence of invasive infections was 3.2 per 1000 admissions. One hundred and forty six isolates were collected, from blood (61.5%), peritoneal liquid (29.5%), cerebrospinal fluid (6.4%) and pleural effusion (2.6%) cultures. Fifty-two percent corresponded to *Candida albicans*, followed by *C. glabrata* (15.2%), *C. parapsilosis* (10.9%), *C. lusitanae* and *Cryptococcus neoformans* (5.4% each), *C. krusei* (3.3%), *C. tropicalis* and *C. dubliniensis* (2.2% each) and *C. famata*, *C. kefir* and *Trichosporon mucoides* (1.1% each). Regarding antifungal susceptibility profile, 16.3% of all strains were resistant to fluconazole; 4.7% were resistant to voriconazole and posaconazole and 2.3% to 5-flucytosine and caspofungin; no resistance was found to anidulafungin, micafungin or amphotericin B. Most isolates were collected from the Surgery department (38%) and Intensive Care Units (19.6%). Most patients were aged between 41 and 60 years (39%) and 67% were male. Most fungal infections were associated with surgical procedures (OR=1.95, 95%CI [1.39-2.74]), gastrointestinal disease (OR=5.33 [3.82-7.42]), neoplasia (OR=5.22 [3.73-7.30]), and diabetes (OR=1.56, [1.04-2.34]). Mortality rate attributed to fungal infections was 46%: 60% had gastrointestinal disease and 40% were oncological patients. **Conclusion:** Epidemiological studies concerning fungal infections are scarce in Portugal, but extremely valuable. *C. albicans* was the most common isolate. Susceptibility profiles showed low antifungal resistance except to fluconazole; all isolates were susceptible to anidulafungin, micafungin and amphotericin B. Surgery and gastrointestinal disease were frequently associated with fungal infections being the outcome often fatal. This work is supported by Pfizer Inc.