P2221 Seven years of candidaemia (2011-2017) in a Madrid tertiary hospital

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Background: Candidemia is a factor of negative prediction in hospitalized patients, with mortality over 30%. We analyzed epidemiological data of all candidemia episodes occurred in our institution during a 7-year period (2011-2017), including the prevalence of the different Candida species, their origin and their susceptibility to different antifungal agents.

Materials/methods: A retrospective chart review of all patients with positive blood cultures (BC) for Candida spp. during the study period was performed. Identification of Candida isolates was performed by MALDI-TOF (Bruker). Susceptibility testing to anidulafungin, micafungin, caspofungin, 5-fluorocytosine, posaconazole, voriconazole, itraconazole, fluconazole and amphotericin B was performed by using the SensititreYeastOne microdilution system (Trek Diagnostic Systems), being susceptibility categories defined using CLSI-2017 criteria.

Results: There were 232 patients with 330 positive BC for Candida species during the study period. Mean (SD) age of patients was 65 (18) years, being 139 (60%) males. Prevalence of candidemia was higher in medical (63%, 146/234) than in surgery wards (37%, 86/232). Globally, C. albicans was the most frequently isolated species (107/232, 46%), followed by C. parapsilosis (63/232, 27%) and C. glabrata (47/232, 20%). Nevertheless, non-albicans species prevalence varied across the different years. In 2011, 2014 and 2015 a marked increment of C. parapsilosis fungemia was observed, whereas C. glabrata cases raised in 2016 and 2017. Resistance to fluconazole was observed in 24 out of 240 isolates (10%), being the majority of them C. glabrata (n=9) and C. krusei (n=5), but 7 isolates (3%) of fluconazole-resistant C. albicans were found (7/107, 7%). All isolates were susceptible to echinocandins and amphotericin B, with the exception of 2 echinocandin-intermediate C. parapsilosis and 1 amphotericin B-resistant C. krusei.

Conclusions: C. albicans was the most prevalent species found in candidemia in our hospital. The prevalence of non-albicans species was variable with epidemic waves observed for C. parapsilosis and C. glabrata. Echinocandins should be recommended in our institution for the empiric treatment of candidemia, due to the increased prevalence of C. glabrata and frequent finding of azole-resistant C. albicans.