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Abstract (poster session)

Epidemiological trends of nosocomial candidaemia over a 7-year period at a Nantes university hospital, France

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Objectives: To determine the main epidemiological characteristics of candidemia in our hospital over a 7-year period. **Methods:** All episodes of candidemia occurring between February 2004 to December 2010 were analysed retrospectively. Demographic and clinical data (age, sex, medical unit, risk factors) as well as antifungal therapy were recorded. Species identification was performed using phenotypical methods. Isolates belonging to the *C. parapsilosis* and *C. glabrata* species complex and rare *Candida* species were confirmed by ITSrDNA sequencing. In vitro susceptibility to fluconazole, voriconazole, amphotericin B and caspofungin were determined by E-test®. **Results:** 187 episodes of candidemia (n=193 *Candida* spp. isolates) occurring in 184 patients were analysed (sex ratio=1.5, mean age=53.4 years). Global incidence of candidemia was 0.37 per 1000 admissions. Incidence rate increased from 0.27‰ to 0.45‰ between 2005 to 2009. Higher incidences were noted in Hematology (6.65‰) and intensive care units (ICU, 2‰). Central venous catheter and antibiotherapy were the most frequent risk factors (67% and 75% respectively). *Candida albicans* was the predominant species (51.8%) followed by *C. parapsilosis* (14.5%), *C. glabrata* (9.8%), *C. tropicalis* (9.8%), *C. kefyr* (3.6%) and *C. krusei* (3.1%). No trend toward an increased prevalence of non-*albicans* species was noted over the time. Species distribution among episodes clearly differed between units, *C. tropicalis* being the most prevalent in Hematology (27%) whereas *C. albicans* was the dominant species in the ICU (73%). Prevalence of non-*albicans* was higher in Hematology compared to any other medical units (33 of 37 episodes, 89.2%). Fluconazole followed by caspofungin were the main antifungals given at the time of diagnosis (43% and 28% of the episodes). Notably, over the study, a clear trend over an increased use of caspofungin was observed. Overall in vitro susceptibility to the four antifungal drugs was noted. 12-weeks mortality rate was 29%, being lower for *C. parapsilosis* (18%) than for *C. tropicalis* (47%). Despite the limited number of patients, a trend to a better survival was noted in patients with catheter removal. **Conclusion:** This study highlights that *C. albicans* is the main species responsible for candidemia at our hospital as well as the significant prevalence of *C. kefyr* ranking at the fifth common *Candida* species. Important differences in species distribution was noted between medical units.