

**P2237 Predictors of fatality among the patients with candidaemia caused by different *Candida* species and resistance of antifungal agents: a multi-centre prospective observational cohort study of the Turkish Fungal Infections Study Group**

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**Background:** Candidemia is one of the leading cause of high fatality among hospitalized patients. We aimed to describe antifungal resistance and predictors of fatality in the patients with candidemia.

**Materials/methods:** A prospective observational study was performed among the consequent patients with candidemia from six medical centers, between January 2015 and November 2018. Treatment success was defined as clinical and mycologic response at the end of therapy. Matrix Assisted Laser Desorption Ionization Time of Flight Mass Spectrometer (MALDI-TOF) was used for species level identification. Antifungal susceptibility tests were performed according to the Clinical Laboratory Standards Institute (CLSI) by broth microdilution. The variables that was found to be significant effect on fatality in univariate analysis were included to the multivariate model and cox regression was performed.

**Results:** A total of 246 patients with candidemia were included, 46 (%17) patients were < 18 years of age. The most common *Candida* species were *C. albicans* (44%), *C. parapsilosis* (27%), *C. tropicalis* (11%), *C. glabrata* (8%). The mean age of the patients with *C. parapsilosis* was 44 as the youngest, whereas it was 63 with *C. glabrata* infection, as the oldest. Overall case fatality rate (CFR) was 52%. The highest CFR was among the patients with *C. albicans* (61%, p=0.007), the lowest was among with *C. parapsilosis* (38%, p=0.005). The rate of resistance against fluconazole was 17% in *C. parapsilosis* isolates with no significant effect on fatality. No resistance against echinocandins (mainly caspofungin) was detected. In multivariate analysis, being in ICU (HR:2.1, CI: .146-3.29, p<0.001), using CVK (HR:2.9, CI: 1.16-7.12, p=0.022), detection of *C. parapsilosis* (HR:0.49, CI: 0.29-0.81, p=0.005), using fluconazole (HR:0.52, CI:0.35-0.77, p=0.001) were found to be significantly associated with fatality.

**Conclusions:** Among *Candida* species, *C. albicans* candidemia is the most serious threat for Turkey because of the high mortality rate. High fluconazole resistance in *C. parapsilosis* has no effect on the fatality. The severity of the patients seems to be the most significant parameter in fatality. Bloodstream Infections due to candida species should be monitored carefully and therapy options should be re-considered.

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