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1: [Med Mycol.](#) 2008 Sep;46(6):581-8.

Seven-year trend analysis of nosocomial candidemia and antifungal (fluconazole and caspofungin) use in Intensive Care Units at a Brazilian University Hospital.

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Candidemia is associated with high morbidity and mortality resulting in significant increases in the length of patients' hospitalization and in healthcare costs. Critically ill patients are at particular risk for candidemia because of their debilitated condition and frequent need for invasive procedures. The aim of this study was to characterize the incidence and epidemiology of candidemia over a seven-year period in intensive care units (ICUs) and the use of fluconazole and caspofungin in a large university-affiliated hospital. All cases of candidemia were identified by surveillance, using the Centers for Diseases Control and Prevention criteria. Demographic variables, use of antifungal (fluconazole and caspofungin) and patient outcomes were evaluated. The chi² test for linear trend was employed to evaluate the distribution of *Candida* spp. and the use of fluconazole and caspofungin by defined daily dose (DDD) per 1,000 patients-days during the study period. One hundred and eight episodes of candidemia were identified. The overall incidence of candidemia ($P=0.20$) and incidence of non-*Candida albicans* *Candida* infections ($P=0.32$) remained stable over the study period and ranged from 0.3-0.9 episodes per 1,000 catheter-days and 0.39-0.83 episodes per 1,000 patients-days. However, the use of fluconazole and caspofungin increased significantly ($P<0.001$). While there were no reports of the use of fluconazole for prophylaxis in 1999, its use for this purpose increased from 3% in 2000 to 7.0% ($P=0.07$) in 2006. *C. albicans* was the most frequent specie isolated and burns and cancer were the most frequent underlying conditions. The overall mortality was 76%. There was no difference between *C. albicans* and non-*C. albicans* *Candida* infections when the crude and 14-day mortality rates were compared. Our data demonstrated that *C. albicans* is still the most frequent species causing candidemia in our intensive care units. Our rates of candidemia are lower than those reported from the region and similar to American and European hospitals. Although the incidence of blood stream infections (BSI) and candidemia remained stable, the use of fluconazole and caspofungin increased significantly over the years included in this study but had no impact on the incidence of infections caused by non-*C. albicans* *Candida* species. PMID: 19180727 [PubMed - indexed for MEDLINE]