

Title: PREVALENCE OF *CANDIDA* SPP. IN BLOODSTREAM INFECTIONS IN HOSPITAL SÃO RAFAEL, SALVADOR-BAHIA.

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Abstract:

Yeasts of the genus *Candida* are considered one of the main pathogens of bloodstream infections in hospitals and has been associated with long-term and high mortality among patients. The increase in cases of candidemia relates mainly to patients hospitalized in critical units, use of antibiotics, immunosuppressive therapy, parenteral nutrition and multiple invasive procedures. Despite the efforts of the medical community, the morbidity and mortality associated with candidemia remains high, with rates up 40%. Although *C.albicans* is the most common specie, cases of infections caused by other species have increasing. The aim of this study was to identify the frequency of *Candida* species isolated from bloodstream infections in a tertiary, private, philanthropic hospital, focusing on patients highly complex surgical and oncology the city of Salvador-Bahia. A longitudinal retrospective study was performed to identify the frequency of *Candida* species in cases of candidemia in the period 2010 to 2014. The identification was performed with automation (Vitek 2, bioMérieux) and a Chromogenic medium the period 2010 to 2013, and in 2014 the Maldi-tof (Vitek-MS, bioMérieux). In the five years of study, a total of 259 cases of candidemia was observed, with an average of 52 cases per year, and the highest number in 2012, 25,1% (n=65) and the lowest in 2013, 21,6% (n=37). In the study period, the total number of isolates, *C. albicans* accounted for 22% (56) and non-*albicans* 78% (203) of cases of candidemia. Among the non-*albicans* species, the most isolated *C.parapsilosis* accounted for 30.5% (79), *C.tropicalis* 22.8% (59) and *C.glabrata* 13.1% (34). Other species isolated with low frequency, 1-3 cases during the study, were *C.krusei*, *C.guilliermondii*, *C.famata*, *C.peliculosa* and *C.kefyr*. The identification of *Candida* species is crucial to choose the best therapeutic approach, and in our study, we found a significant prevalence of non-*albicans* species. In addition, we have in our service, the ability to quickly identify these species due to the use of advanced technology combined with the improvement of the team. We correlate the increase in isolation of non-*albicans* species, in recent years, the upgrading identification techniques, reduction in antifungal susceptibility, use of prophylactic antifungal, increase in broad spectrum antimicrobial consumption, use of invasive devices and the important profile of the population of cancer patients of the institution.

KEYWORDS: Candidemia, *Candida*, fungal identification, Maldi-tof