**TITLE:** INVASIVE CANDIDIASIS IN INTERNAL PATIENTS IN A PUBLIC HOSPITAL OF RECIFE-PE

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## ABSTRACT:

The worldwide scenario in recent decades shows the increasing incidence of invasive candidiasis. This fungal infection has been prominent, with a mortality rate reaching almost 60% of the cases, especially in severely ill patients, such as those living with HIV/AIDS, malignant, transplanted, patients exposed to medicalinvasive devices and time in the hospital environment, especially in intensive care units. Exposure to risk factors associated with resistance to antifungal agents used are examples of conditions that have led patients to death. In this sense, the early diagnosis for the beginning of a suitable treatment is indispensable for clinical improvement. Thus, this study aimed to diagnose invasive candidiasis in internal patients in a public hospital in the city of Recife-PE. Clinical samples were collected, such as blood, pleural fluid, alveolar bronchial lavage, cerebrospinal fluid, among others, and mycological diagnosis was performed through direct examination and culture, which were taxonomically identified through proteomic criteria using the MALD- TOF MS. In one year, 21 patients with invasive candidiasis were diagnosed. In order to perform the mycological diagnosis, oval and hyaline yeast cells and / or pseudo-mycelium were observed by direct examination and in culture, after 15 days of incubation at 37°C, yeast colonies were obtained from white to cream-colored creamy. After the MALDI-TOF MS, the species Candida tropicalis (11), C. albicans (five), C. glabrata (three) and C. parapsilosis (two) were identified. Among the patients, 12 were male and nine female, ranging in age from 48 to 81 years and had underlying diseases such as malignant neoplasms, diabetes, hypertension, pancreatitis and intestinal obstruction. In our study, C. tropicalis was the most isolated species, unlike some authors reporting C. albicans as the most frequent species. This epidemiological change in invasive infections varies from country to country and is influenced by the type of patients studied as well as the empirical institution of antifungal therapy. In addition, C. non-C. albicans species are more refractory to antifungal treatments. Thus, a correct identification of the etiological agents is of fundamental importance for the knowledge of the species involved in invasive candidiasis and the institution of adequate antifungal therapy.

**Keywords:** epidemiology, invasive candidiasis, proteomic identification

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