

TITLE: PREVALENCE OF *Candida* spp. IN URINE SAMPLES OF PATIENTS INTERNED AT A TERTIARY PUBLIC HOSPITAL IN NATAL, RIO GRANDE DO NORTE STATE, BRAZIL

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ABSTRACT:

The presence of *Candida* spp. in urine samples is defined as candiduria, but it is not necessarily correlated with urinary tract infections. The interpretation of candiduria is not well established, such as in bacteriuria, where quantitative colony counts are broadly used. However, this finding is very common in hospitalized patients under treatment with broad-spectrum antibiotics, especially in patients admitted in intensive care units (ICUs) and may represent clinical relevance. *Candida albicans* is the most commonly isolated species in candiduria episodes. Nevertheless, non-*Candida albicans* *Candida* (NCAC) species such as *C. glabrata*, *C. tropicalis*, *C. parapsilosis* and *C. krusei* are commonly isolated from urine samples. NCAC species have peculiarities in terms of natural history and treatment. This study aimed to evaluate the prevalence of *Candida* spp. isolated from urine samples from patients interned at a public tertiary hospital from December 2015, until the present moment, in Natal, Rio Grande do Norte state, Brazil. A total of 65 urine cultures were obtained and the strains were identified by the classical methodology, including the use of CHROMagarCandida® with the observation of the color presented by the colonies, microculture on cornmeal agar with the addition of Tween 80 for the observation of micromorphological structures, auxanogram and zymogram. Forty-nine isolates of *C. albicans* were obtained (75%), whereas 9 (14%) belonged to *C. tropicalis* and 7 (11%) were *C. glabrata*. Thus, our results show that *C. albicans* was the most prevalent species found in urine samples but other important *Candida* species have been isolated, suggesting greater attention to the treatment of episodes of candiduria by NCAC species. For instance, *C. glabrata* may frequently develop resistant to fluconazole and other azoles.

Key words: candiduria, prevalence, *Candida albicans*, CNCA.