Title: Evaluation of susceptibility to antifungal agents and distribution of Candida spp. isolated from hospitalized patients.

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Nosocomial infections caused by resistant Candida isolates has increased in recent years. The resistance to antifungal agents affectstherapeutic treatment against these yeasts, which can increase morbidity and mortality rates. Inthis study, we aimed at verifying the occurrence of the genus Candida isolated in hospitalized patients and assessing the susceptibility profile to antifungal agents.A study was conducted with clinical urine samples (39), rectal swab (12), nasal swabs (12), tracheal aspirate (8), blood (5), catheter tip (3), sputum (1) and injury leg and ankle (1) of patients admitted to the HU-UFGD, from March 2013 to March 2014. The yeasts were isolated and presumptively identified among Chromagar Candida. The identification of the isolates to the species level was confirmed by amplifying and sequencing the ITS region. The in vitro susceptibility testing was performed by the microdilution broth method in accordance with the protocol M27-S4 Clinical and Laboratory Standards Institute; moreover, the antifungal agents tested were: amphotericin B, fluconazole, itraconazole and voriconazole. Out of the total of 81 isolates: 38.27% were C. albicans; 33.3%, C. tropicalis; 11.1%, C. glabrata; 7.4%, C. krusei, 4.9%, C. parapsilosis; 2.47%, C. lusitaniae; 2.47%, C. guilliermondii. All isolates were susceptible to amphotericin B. C. glabrata isolates were resistant to itraconazole (44.4%) and dose-dependent to fluconazole (77.8%). C. tropicalis isolates showed dose-dependent voriconazole and fluconazole -11.1% and 3.7%, respectively. C. tropicalis presented isolates resistant to fluconazole and voriconazole -13.7% and 7.4%, respectively. C. albicans showed no resistance to any of the antifungals tested and 3.22% of the isolates of this species showed dose-dependent to fluconazole. All isolates of C.parapsilosis, C. guilliermondii, and C. lusitaniae were sensitive to all tested antifungal agents. This study demonstrated that 8.64% of the isolates were resistant to some of the tested antifungal agents and all Candida species were not Candida albicans. This may be related to the indiscriminate use of antifungal selecting Candida species, thus confirming the importance of species-level identification to implement appropriate antifungal therapy.

KEYWORDS: Region ITS; Resistance; CIM; Candida.

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