575 strains of *Candida* distribution and antibiotic resistance analysis in Affiliated Hospital of Hainan medical university

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To explore the type, characteristic and drug resistance of *Candida* infection in Affiliated Hospital of Hainan medical university, for clinical rational use of antifungal agents provide aetiological basis. Methods: The fungi was isolated and cultured by using the conventional methods from June 2013 to June 2014. Microbial susceptibility was used to analyze antifungal drug susceptibility. Results: Among the 575 strains Candida, at the first three was Candida albicans accounted for 64.0%, followed by Candida glabrata accounted for 12.2% and Candida tropicalis accounted for 11.2%. Respiratory tract specimens accounted for 52.5%. Department of respiratory medicine accounted for 27.7%. The major of age distribution was above 60 years old, which accounted for 75.5%. Non-Candida albicans made up the majority of the isolates from blood cultures specimens. In 5 kinds of antifungal susceptibility test, amphotericin B, 5-fluorocytosine on Candida resistance rates were lower than 5.0%. Volconazole, Itraconazole and fluconazole against Candida albicans, Candida tropicalis, Candida glabrata, Candida parapsilosis resistance rates were high, showing different degrees of resistance. Conclusions: The rate of Non-Candida albicans species associated with deep infection is rising, despite that Candida albicans remains the most common pathogenic Candida species in Affiliated Hospital of Hainan medical university. The constituent ratio of Candida strains is gradually changing, to which a great attention should be paid. Therefore, accurate information on species identification and drug sensitivity should help proper antifungal treatment in clinical practices.

[KEY WORDS] Candida; Infection; Bacteria distribution; Antibiotic resistance