Trend of Candida infection and antifungal resistance in a tertiary care hospital of north east India

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Abstract

The present study was based on the epidemiological picture of Candida albicans and non-albicans Candida encountered in different systemic and mucosal infections including HIV/AIDS in North East India. The introduction of chemotherapeutic and antibiotic agents as well as appearance of HIV infection and several other factors like diabetes, old age, etc., has led to emergence of several opportunistic pathogens and Candida species, probably the most important pathogen causing majority of infection. Candida species isolated from different clinical samples including patients with HIV/AIDS were subjected to species level identification using standard yeast identification protocol. Antifungal sensitivity test was done by Kirby-Bauer disc diffusion method. Out of 113 Candida species, 72.56% non-albicans Candida and 27.43% C. albicans were isolated. In this study, among non-albicans Candida, C. glabrata was 32% followed by C. tropicalis 30% which were isolated. Non-albicans Candida was found to be significant over C. albicans (P = 0.086) at ten percent level of significance. The present study support the need of species level identification and periodic surveillance of the antifungal susceptibility as it would provide selection of appropriate antifungal drug.

Key words: Fungi, yeast, Candida albicans, Non-albicans Candida, opportunistic pathogen.