
Abstract:

Background: The occurrence of candidemia is on a rise worldwide. Non-albicans Candida species have emerged as major causes of candidemia in many countries. Added to it is the problem of antifungal resistance in Candida isolates.

Objectives: To find out the prevalence of candidemia in our intensive care unit (ICU) setup along with the antifungal susceptibility pattern of Candida isolates and various risk factors associated with candidemia. Materials and

Methods: All Candida isolates from blood stream infections of ICU patients were included in the 1 year study period (November 2008-October 2009). The isolates were speciated using various phenotypic tests. Antifungal susceptibility testing was done by disk diffusion methods according to Clinical and Laboratory Standards Institute guidelines and also using CANDIFAST. Various risk factors associated with the development of candidemia were looked into.

Results: A total of 39 Candida isolates were isolated during the study period of 1 year (prevalence of 0.65%). Candida tropicalis (74.35%) was the most common isolate followed by
Candida albicans, Candida parapsilosis, Candida krusei and Candida glabrata. All the 39 Candida isolates (100%) were sensitive to amphotericin B while 12 isolates (30.8%) were resistant to fluconazole. The risk factors commonly associated with candidemia patients were long term antibiotic therapy (64.1%), use of central venous catheters (56.4%), urinary catheters (53.9%), steroid therapy (35.9%) and diabetes mellitus (33.3%).

Conclusion: Candidemia is emerging as a significant problem in hospitalized patients, especially in ICU setups. Non-albicans Candida species are the major cause of candidemia as found in our study and few other studies in India. Multicentric studies involving many hospitals are required to know the true prevalence of candidemia and the status of antifungal drug resistance among Candida isolates in our country.