**A STUDY OF THE PROFILE OF CANDIDEMIA IN A TERTIARY CARE CENTRE IN SOUTH INDIA**

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## INTRODUCTION

Candida species are the most common cause of fungal infections worldwide. They can cause a great variety of infections ranging from simple, mucocutaneous lesions to severe, invasive infections that can involve virtually any organ. Blood stream infections by Candida are increasingly common, and often are associated with high mortality rates.¹,² Recently there has been an increase in the incidence of non-albicans Candidemia, such as C. glabrata, C. krusei, C. tropicalis, and C. parapsilosis.³⁻⁴ Candidemia is the 4th most common cause of nosocomial bloodstream infections in North America.⁵⁻⁶ Our hospital has also been reporting an increased incidence of Candidemia in recent years. So, we have studied the profile of Candidemia patients in our hospital.

## METHODS

This is a prospective study. Study conducted at Kasturba Hospital, Manipal, Karnataka, India Study period: 6 months from August 2011 to January 2012. Patients diagnosed as Candidemia* were included in the study. *CANDIDEMIA: On the basis of the guidelines of the Centers for Disease Control and Prevention and the Infectious Diseases Society of America (IDSA)¹⁻²,³ Candidemia was defined as the isolation of a Candida spp. from at least 1 blood culture in the presence of signs and symptoms of systemic fungal infection.

## RESULTS

1) Total of 23 patients were included in this study.
2) Average age of the patients was 47.17 years with 47.8% males.
3) The following risk factors for Candidemia were found to be common in our study:
   - 23 patients (100%) were on broad spectrum antibiotics for >5 days.
   - All the patients were in the ICU but 17 patients (73.9%) had duration of ICU stay >7 days.
   - 20 patients (86.9%) were on mechanical ventilation.
   - 18 patients (78.3%) had severe sepsis.
   - 17 patients (73.9%) had central venous catheters in situ at the time of development of Candidemia.
   - 18 patients (78.3%) had received blood product transfusions.
   - Most commonly used antibiotic was Piperacillin-Tazobactum followed by Cefoperazone-Sulbactum.
   - The most common species isolated was Candida tropicalis (45%).
   - Candida albicans was associated with only 11% of cases.
   - All of the Candida isolates were sensitive to Fluconazole.
   - Fluconazole was the most common antifungal drug used.
   - Mortality rate in our study was 61% (14 patients).

## CONCLUSION

- Candida is to be considered as an important cause of morbidity and mortality in ICU patients especially those with prolonged ICU stay, broad spectrum antibiotic use, presence of Central venous catheters, mechanical ventilation and those in severe sepsis.
- Non-Albicans species were more common than Albicans species.
- However all of the isolates were sensitive to Fluconazole.
- Candidemia is associated with high mortality rates in the ICUs.

## REFERENCES