

SPECIES DISTRIBUTION AND ANTIFUNGAL SUSCEPTIBILITIES OF BLOODSTREAM CANDIDA SPECIES FROM THE ASIA-PACIFIC REGION

Tan TY¹, Hsu LY², Alejandria MM³, Chinniah T⁴, Kiratisin P⁵, Shin JH⁶, Tran TT Nga⁷, Tan AL⁸, Ng SY¹

¹ Changi General Hospital, ² National University Health System, ³ UP-Philippine General Hospital, ⁴ Raja Isteri Pengiran Anak Saleha (RIPAS) Hospital, ⁵ Siriraj Hospital, ⁶ Chonnam National University Hospital, ⁷ Cho Ray Hospital, ⁸ Singapore General Hospital

24th ECCMID
10-13th May, 2014
eP355

INTRODUCTION

Candida bloodstream infections account for significant morbidity and mortality. Accurate data on species distribution and antifungal susceptibilities is critical to support appropriate clinical decision making, and the formulation of treatment guidelines. This study set out to examine the species distribution and susceptibilities of *Candida* bloodstream infections from nine participating centres across the Asia-Pacific (AP) region.

MATERIALS & METHODS

Participating centres comprised hospitals from Brunei, Korea, Philippines, Singapore, Taiwan, Thailand and Vietnam. Each centre was requested to send a maximum of 50 *Candida* species isolated from bloodstream infections in 2012-2013 to a central laboratory. *Candida* species received for testing were subcultured on chromogenic *Candida* media to ensure isolate purity, and to confirm the submitted species identification. Discordant species were further identified by phenotypic identification (Vitek ID-YST, BioMérieux) and morphology on cornmeal agar. Antifungal susceptibility testing was performed using Sensititre™ YeastOne Y10 plates (Thermo Scientific). Minimum inhibitory concentrations were read following 24 hours incubation, and antifungal susceptibilities were interpreted using CLSI breakpoints¹ as susceptible (S), susceptible dose-dependent (S-DD) and resistant (R).

References

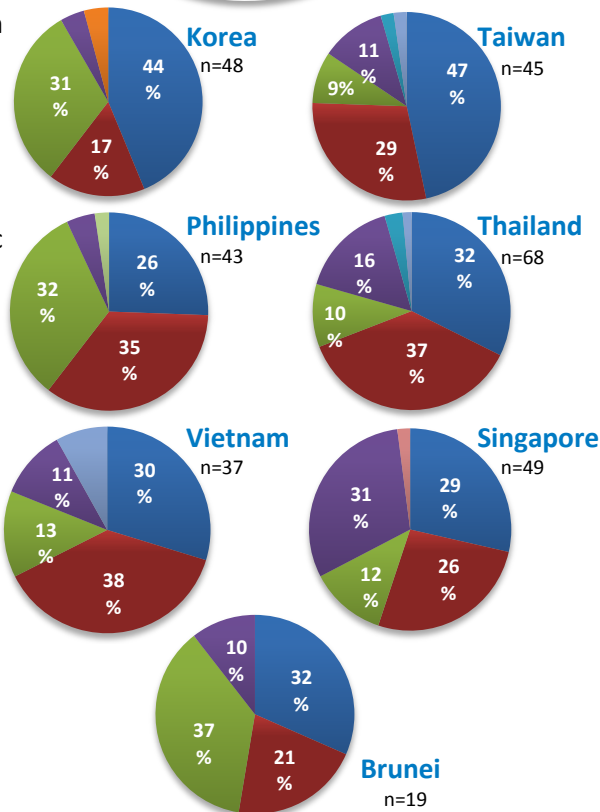
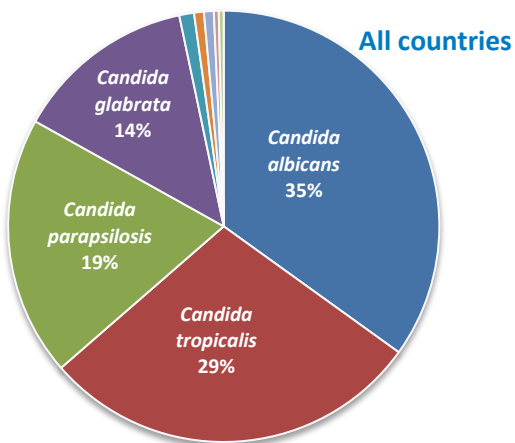
1. CLSI. Reference Method for Broth Dilution Antifungal Susceptibility Testing of Yeasts; 4th Informational Supplement. CLSI document M27-S4. Wayne, PA: Clinical and Laboratory Standards Institute, 2012

In Memoriam To Dr. Charles Farthing who supported the Asia-Pacific candidaemia study from inception.

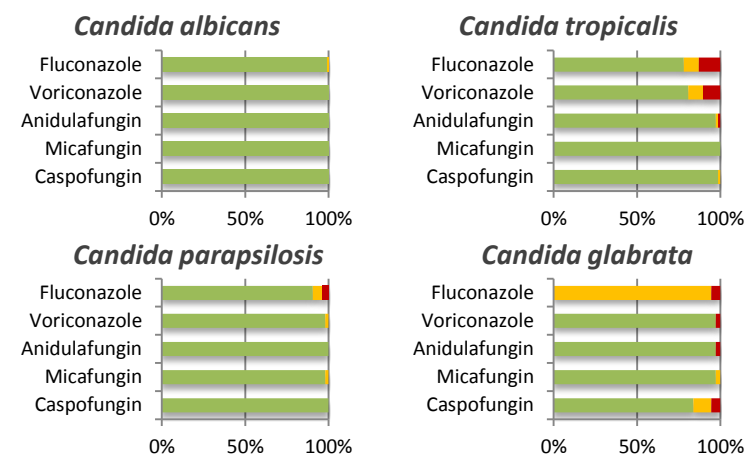
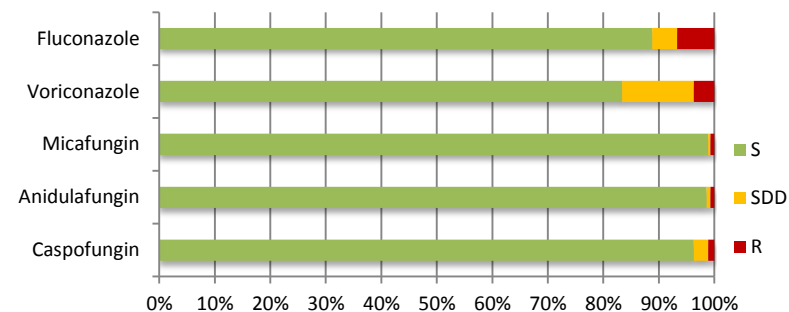
Study centres



EPIDEMIOLOGY



SUSCEPTIBILITY TESTING



CONCLUSION

Candida albicans now consists of less than 40% of all reported isolates from bloodstream infections from the AP region. *C. albicans* remains susceptible to fluconazole, but 9.8% of the non-*albicans* group were resistant to fluconazole, with a further 6.9% falling into the S-DD category. Based on these results, suspected systemic candida infections in this region should be treated using more aggressive fluconazole dosing regimens, with an echinocandin recommended for treatment of candidaemia in critically-ill patients and those with *Candida* spp. in blood cultures.

Acknowledgements: This study was sponsored by MSD