

***Candida* species distribution from various clinical specimens in a tertiary hospital in Selangor**

Ngah Mohamed N, Awad SN, Mohd Shah NA

Microbiology and Parasitology Unit, Department of Clinical Diagnostic Laboratories, Hospital Al-Sultan Abdullah (HASA), Universiti Teknologi MARA, Bandar Puncak Alam Selangor, Faculty of Medicine, Universiti Teknologi MARA, Jalan Hospital, Sungai Buloh, Selangor

ABSTRACT

Introduction: Prevalence of *Candida* infections are increasing worldwide due to escalating numbers of immunocompromised individuals. It poses a significant challenge in terms of patient outcome and management. Thus, local epidemiological data on *Candida spp* is crucial to predict the emerging trends of the infection. **Materials and Method:** Data on *Candida* species isolated from clinical specimens were retrospectively collected by using the laboratory information system (LIS) from 1st January 2021 until 12th July 2024. *Candida spp* isolates were identified by germ tube or/and VITEK2 YST identification card. **Results:** A total of 122 *Candida spp* were isolated from various clinical specimens. The most common species isolated is *C. albicans* (45%) followed by *C. tropicalis* (14%), *C. glabrata* (13%), *C. parapsilosis* (10%) and *C. guilliermondii* (3%). About 15% of *Candida spp* isolates were not further speciated and classified as non albicans. *C. albicans* isolates were isolated mostly from non-sterile specimens i.e vaginal swab (17.2%) and urine (11.5%) specimens, while non albicans isolates were mostly isolated from sterile specimens in blood cultures specimens (23.8%). The most frequent species isolated from sterile specimens was *C. tropicalis* (25%). A total of 39 isolates (32%) were isolated from critical ill wards (ICU and CICU) specimens. **Conclusion:** Though *Candida albicans* is the predominant isolate, the emergence of non-albicans species in sterile samples is becoming increasingly common, highlighting the need for updated diagnostic and treatment approaches to address this evolving challenge in clinical settings.