**Objectives**:

This study was aimed at identifying the species distribution, antifungal suceptibility pattern and analysis of demographic data of patients with non *Candida* yeasts causing blood stream infections in Sri Lanka.

**Materials & Methods:**

This was a retrospective analysis of Non Candida yeast blood culture isolates received from different hospitals in Sri Lanka to Mycology Reference Laboratory from 2018 to 2024.

**Results**:

Altogether 540 isolates were identified as yeasts other than *Candida* sp. during the study period. Majority of the samples (n=180,33%) were received from National Hospital of Sri Lanka (NHSL) followed by National Cancer Institute (n=88,16.3%) in Colombo. National Hospital of Galle from Southern province accounted for the 3rd highest number (n=80,14.8%) in this cohort.

*Trichosporon* sp. was the commonly isolated yeast (n=200,37%) causing non *Candida* blood stream infections in Sri Lanka followed by S*accharomyces* sp. (n=137,25.3%). Interestingly, 51 isolates were identified as *Cryptococcus neoformans* and 5 isolates were identified as *Cryptococcus* species.

There were few cases of *Rhodotorula* sp, *Geotrichum sp.* and *Sporobolomyce*s sp. as shown in the figure 1. In addition, there were 5 mixed infections where non *Candida* yeasts were concomitantly causing blood stream infections with a *Candida* species. Unfortunately, 121 isolates were not possible to identify further with available laboratory facilities.

Antifungal Suceptibility Testing (AFST) was performed with E strip method and interpreted according to CLSI guideline. Fluconazole and amphotericin B AFST was performed in only 48.7%(n=263/540) and 31.7%(n=171/540) of isolates respectively due to limited resources.

Overall suceptibility to fluconazole was lower (51.7%) than that of amphotericin B (67.8%) in these non *Candida* isolates.

*Trichosporon sp.* had 77.1% (n=101/131) sensitivity to fluconazole and it was increased to 81.9% (n=59/72) when tested with amphotericin B. Whereas *Trichosporon sp.* showed highest sensitivity to voriconazole (n=33,100%) which is considered as the drug of choice in many instances.

*Saccharomyces* sp. had higher resistant rates compared to *Trichosporon* sp. against all 3 tested antifungals. Only 17% (n=15/88) of *Saccharomyces* isolates were sensitive to fluconazole and the sensitivity increased upto 56.3% (n=36/64) when tested against amphotericin B. Again, voriconazole showed the highest sensitivity for *Saccharomyces* sp. in this study group where 78.6% (n=22/28) of isolates were within the sensitive range.

Majority of the patients developed non *Candida* yeast blood stream infections were males in this population. There were 68.9% (337/489) of male patients and only 31% (n=152/489) were females. More than 50% (n=276/485)of the patients with non *Candida* yeast infections were above 41 years of age and 7% were infants.

**Conclusions**

*Trichosporon* sp. is the commonest non *Candida* yeast causing blood stream infections in Sri Lanka followed by *Saccharomyces* sp. Voriconazole has shown the highest sensitivity for two common non *Candida* yeast blood stream infections in Sri Lanka.

As non *Candida* yeasts can cause blood stream infections in all age catogaries, proper species identification and antifungal suceptibility testing is important in managing infected patients effectively due to their increased resistance for commonly used antifungals.