

## **Species distribution and antifungal sensitivity patterns of vaginal yeasts**

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### **Abstract**

**Objectives:** To identify yeast isolates in vaginal specimens to species level and determine their antifungal susceptibility patterns. **Design:** Cross-sectional laboratory-based study. **Setting:** The Aga Khan University Hospital (AKUH), Nairobi. **Subjects:** Yeast isolates from high vaginal swabs presented to the laboratory for culture and sensitivity were identified to species level using the API Candida system and subjected to broth micro dilution susceptibility testing. **Main outcome measures:** Frequency tables and graphs were used to summarize the data. Susceptibility data was analysed by the non-parametric Fisher's exact test.  $P < 0.05$  was considered statistically significant. **Results:** A total of 101 yeasts were studied. *C. albicans* was the prominent species (69.3%) followed by *C. glabrata* (12.9%), *C. famata* (5.0%), *C. krusei* (3.0%), *Trichosporon* species (3.0%) and *S. cerevisiae* (3.0%), *C. parapsilosis* (1.0%). Three (3.0%) of the isolates had profiles that fell between *C. glabrata* and *C. famata*. The percentages of *C. albicans* susceptible to flucytosine, amphotericin B, fluconazole and itraconazole were 94.3, 92.9, 100 and 90 respectively; that of non-*albicans* isolates were 93.5, 80.6, 77.4 and 29 respectively. There was no significant difference ( $p > 0.05$ ) between the susceptibility of *C. albicans* and non-*albicans* isolates to flucytosine and amphotericin B, however there was a significant difference ( $p < 0.05$ ) to fluconazole and itraconazole. **Conclusions:** *C. albicans* was the predominant cause of vulvovaginal candidacies in this study, and demonstrated good susceptibility to antifungal agents tested. A significant number of non-*albicans* yeasts were identified; these demonstrated reduced susceptibility to all drugs, in particular to the azoles which are commonly used for treatment of vaginal candidacies. The isolation of non-*albicans* yeasts may have clinical implication given their reduced susceptibility to antifungals.