

## Fluconazole Susceptibility of *Candida* Species in Singapore by Disc Diffusion Test

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### Abstract

**Introduction:** Resistance of *Candida* species to fluconazole has been increasingly reported worldwide. To date, the prevalence of resistance to fluconazole in Singapore is unknown. The aim of this study was to use a newly described agar disc diffusion method to study levels of susceptibility of *Candida* species to fluconazole in several hospitals in Singapore. **Materials and Methods:** Three hundred and ninety *Candida* isolates from clinical specimens collected from different sites were tested, of which 191 isolates (49.0%) were *C. albicans*, 69 (17.7%) were *C. parapsilosis*, 59 (15.1%) were *C. glabrata*, 51 (13.1%) were *C. tropicalis* and 4 (1.0%) were *C. krusei*. Susceptibility testing was performed using 25 µg fluconazole discs and standard Mueller-Hinton agar supplemented with 2% glucose and 0.5 µg/mL of methylene blue. **Results:** Overall, 381 (97.7%) isolates were susceptible, 6 (1.5%) were susceptible dose-dependent, and 3 (0.8%) were resistant to fluconazole. Of the individual species, 99.5% of *C. albicans*, 93.2% of *C. glabrata*, 0% of *C. krusei*, and 100% of *C. parapsilosis*, *C. tropicalis* and other *Candida* species were susceptible. **Conclusion:** The resistance of *Candida* species to fluconazole, as measured using a new disc diffusion method, is low in Singapore, with the exception of *C. krusei*. Fluconazole remains a useful agent for the treatment of candidiasis in this country.

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**Key words:** Antifungal susceptibility testing, Disc diffusion method, Resistance

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