



POSTER PRESENTATION

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# In vitro antifungal susceptibility of *Candida albicans* isolates from oral cavities of patients infected with human immunodeficiency virus in Ethiopia

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## Summary objective

Oral Candidiasis is the most common HIV related oral lesion. Most patients are infected with a strain originally present as a commensal of the oral cavity. The chronic use of antifungal agents, in the treatment of candidiasis mainly in HIV/AIDS patients leads to the selection of strain resistant to this therapy. The objective of this study was to evaluate the in vitro susceptibility of *Candida albicans* to commonly used antifungal agents in Ethiopia.

## Methods

In vitro susceptibility tests were performed using the broth microdilution method following the National Committee for Clinical Laboratory Standards (NCCLS) M27-A guidelines. Data were then analyzed using SPSS for windows version 16.0. Tests of proportions were done with Chi-Square, and a p value of <0.05 was considered as statistically significant.

## Results

A total of 42 oral *C. albicans* isolates from HIV-infected patients were included in this study. Forty one (97.7%) of all isolates were determined fully susceptible to amphotericin B, 40 (95.3%) to nystatin, and 39 (92.9%) to ketoconazole and miconazole. On the other hand, the isolates showed highest rates of resistance against fluconazole (11.9%) relatively. There was little difference in the antifungal susceptibilities of *C. albicans* isolated from patients who had a history of previous antifungal therapy

compared with those who had not received antifungal treatment.

## Conclusion

The in vitro antifungal susceptibility testing of *C. albicans* in this study showed relatively high resistance to commonly used azoles. As with the prescribing of any antimicrobial agent, the use of a systemic antifungal drug must be justified. Efforts must be maintained to avoid inappropriate or unnecessary prescribing of these antifungal.

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