

Comparative effectiveness of chitosan and commercial antifungal drug on clinical isolates of *Candida* species

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A study was conducted to determine the comparative effectiveness of chitosan and ketoconazole on four clinical isolates of *Candida* species (*Candida albicans*, *Candida tropicalis*, *Candida glabrata* and *Candida parapsilosis*) using agar well diffusion technique. Varying concentrations of 40 mg, 20 mg and 10 mg of chitosan and ketoconazole were used. All organisms were sensitive to all concentrations of ketoconazole and chitosan except, *C. parapsilosis* which was not susceptible to all concentrations of ketoconazole while *C. tropicalis* was not susceptible to 10 mg of chitosan. *Candida albicans* produced the highest zone of inhibition in 40 mg of chitosan with an average value of 54.0 mm while *C. glabrata* had the highest zone of inhibition in 40 mg of ketoconazole with a mean value of 62.0 mm. It is observed that Chitosan had a significant effect on *C. parapsilosis* whereas ketoconazole had no visible inhibition on it in all the concentrations used. It is concluded that chitosan has significant effect on the inhibition of the *Candida* species used in this study.

Biography

Atayese Adijat Olabisi is a Ph.D. student of Medical microbiology and parasitology at the Olabisi onabanjo University Teaching Hospital, Sagamu Ogun State, Nigeria. She is an Assistant Chief Laboratory Scientist in the Department of Microbiology Federal University of Agriculture Abokuta Ogun State Nigeria. She has published more than 10 papers in both reputed local and international journals.

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