

## ANTIFUNGAL EFFECT OF LOW MOLECULAR WEIGHT CHITOSAN NANOPARTICLES AGAINST CANDIDA ALBICANS

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**T**his study investigated the antifungal effect of low molecular weight chitosan nanoparticle solution and compared it with nystatin suspension. This randomized single-blind clinical trial study was performed on 40 subjects diagnosed with denture stomatitis. The subjects were divided into two groups, one of which was treated with chitosan nanoparticles and one with nystatin for two weeks. Changes in the erythematous area were recorded during and after treatment. A palatal smear was obtained for each patient before and after treatment to determine the number of blastospores and mycelia of *Candida albicans*. The results were compared using the Mann-Whitney test and T-test. The results showed that chitosan nanoparticle solution significantly decreased the erythematous surface area, burning sensation, time required for clinical improvement, and number of blastospores and mycelia. The antifungal efficacy and biocompatibility of chitosan makes it a promising candidate for use as an antifungal mouthwash.

### Biography

Negar Salehi obtained his Doctorate of Dental Surgery (DDS) from Khorasgan Dental School, Iran. He obtained his PhD degree from Department of Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Iran, He is working as an Assistant Professor for the same department, Rafsanjan University of Medical Sciences, Iran.

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