



Comparison of *Candida albicans* adhesion and colonization on all-metal and metalceramic crowns

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Abstract

Introduction: Candidiasis is responsible for 85% of fungal infections of the oral cavity in humans. There is little data available on the adhesion of *C. albicans* to a variety of crowns. This study aimed to investigate the adhesion and colonization of *C. albicans* to two conventional crowns.

Materials and Methods: In this in-vitro study, first 36 circular disks of two crowns were created: all-metal and metalceramic (18 for each crown). The disks were transferred to plates containing the suspensions 1×10^5 cfu/ml of *C. albicans* colonies. After 40, 80, and 120 minutes, the disks were rinsed in sterile normal saline and shaken at low speed to separate yeast cells. This suspension was cultured on Sabouraud dextrose agar culture medium with pour plate method and was then counted. Differences were considered significant when $p < 0.05$, using computer software SPSS version 18 for windows.

Results: In all-metal and metal-ceramic samples, adhesion and colonization of *C. albicans* significantly increased during time ($p < 0.001$). The lowest adhesion and colonization of *C. albicans* was observed in metal-ceramic crowns after 40 minutes and the highest adhesion and colonization of *C. albicans* in metal-ceramic crowns after 120 minutes.

Conclusion: The results showed that adhesion of *C. albicans* to all-metal crowns was significantly less than metalceramic crowns after 80 minutes and 120 minutes

Biography

Farimah Sardari has completed her undergraduate at Mashhad University of Medical Sciences, Iran and postgraduate at Isfahan University of Medical Sciences, Iran. She has been working as a Assistant Professor in Department of Oral Medicine, Rafsanjan University of Medical Sciences, Iran.

Publications

The Effect of Cigarette and Hookah Smoke on Oral Bacterial Growth, *Streptococcus mutans* and *Streptococcus sanguis*: An In vitro Study.

Comparison of the Antimicrobial Efficacy of Green Tea Extract With 1% Sodium Hypochlorite Against *Enterococcus faecalis*: An In Vitro Study.

The effect of low-level helium-neon laser on oral wound healing.

Anti-inflammatory and cytotoxicity effects of *Salvadora persica* (meswak) extracts on jurkat t-cells.

Salivary IgA concentration in diabetic patients compared to healthy controls



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