

[Available Issues](#) | [Japanese](#)>> [Publisher Site](#)Author: [ADVANCED](#)

Volume Page

Keyword: [TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1881-1361

PRINT ISSN : 0287-4547

Dental Materials Journal

Vol. 29 (2010) , No. 2 p.147-153

[\[PDF \(914K\)\]](#) [\[References\]](#)**Evaluation of *Candida albicans* formation on feldspathic porcelain subjected to four surface treatment methods**[Banu KARAYAZGAN^{1\)}](#), [Arzu ATAY^{2\)}](#), [Mehmet Ali SARACLI^{3\)}](#) and [Yumushan GUNAY^{2\)}](#)

1) Department of Prosthodontics, Faculty of Dentistry, Baskent University

2) Department of Prosthodontics, Dental Clinic, GATA Haydarpaşa Training Hospital

3) Department of Clinical Microbiology, Gulhane Military Medical Academy

(Received February 23, 2009)

(Accepted November 9, 2009)

Abstract:

Candida albicans, known for its adhesion on prosthetic materials and oral tissues, is the most frequently encountered fungal infection in dentistry. The aim of this study was to evaluate the effects of four different surface treatment methods and immersion in artificial saliva on the surface roughness of and *candida* adhesion on dental porcelains. The four surface treatment methods were namely: natural glaze, overglaze, dual ion exchange, and polishing. Surface roughness of porcelain was evaluated using a surface profilometer and by SEM. *Candida* adhesion was examined by culturing two *Candida* strains on porcelain specimens followed by a colorimetric method using XTT/Coenzyme Q0. It became evident that *Candida* adhesion was found more in the specimens treated with natural glaze and polishing. Further, by the visual inspection of SEM images and comparison of surface roughness, polished and natural-glazed specimens showed rougher surface characteristics than overglazed and dual-ion-exchanged specimens.

Key words:[Candida albicans](#), [Feldspathic porcelain](#), [Surface treatment](#)

To cite this article:

Banu KARAYAZGAN, Arzu ATAY, Mehmet Ali SARACLI and Yumushan GUNAY.
Evaluation of *Candida albicans* formation on feldspathic porcelain subjected to four surface treatment methods . Dent. Mater. J. 2010; 29: 147-153 .

doi:10.4012/dmj.2009-016

JOI JST.JSTAGE/dmj/2009-016

Copyright (c) 2010 The Japanese Society for Dental Materials and Devices

