In vitro evaluation of Candida albicans adherence and growth on GC and Acropars soft liners

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Abstract

Background and Aim:

Adherence and growth of *Candida albicans* denture soft lining materials can result in clinical problems, and deteriorations of the materials. Prevalence of denture stomatitis in association with *Candida albicans* has been reported to range between 11%-67%.The aim of this study was to evaluate the adherence and growth of *Candida albicans*on two type of denture soft liners (GC and Acropars) and comparison to control group(Acropars acryl).

Materials and Methods: Twenty-two specimens of each soft lining material and 10 acrylic specimens (polished and not polished) were made and incubated in a suspension of Candida albicans. After rinsing, the specimens were stained with acridine orange and examined under fluorescent microscope .For statistical analysis One-way ANOVA and Post Hoc, Tukey HSD tests were used.

Results: The highest and the least adhesion and growth were found in the not polished and the polished groups respectively. Also, adherence and growth on Acropars soft liner was significantly more than GC soft liner ($p<0.05$). Significant difference was found between polished and not polished acryl ($p<0.05$).

Conclusion: According to results, precise attention in selection of correct material with the lowest side effects and its production steps seems mandatory.

Key words: Adherence, growth, *Candida albicans, soft* liner.

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