Effectiveness of coating acrylic resin dentures on preventing *Candida* adhesion

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**Purpose:** The aim of this study was to prevent the adhesion of *C. albicans* on acrylic resin dentures by modifying their surfaces.

**Materials & Methods:** Ninety acrylic resin plates were divided into three groups. Group I: conventionally processed acrylic resin plates. Group II: plates painted with 2-Octyl Cyanoacrylate adhesive. Group III: plates painted with Adper Single Bond Adhesive. All specimens were immersed separately in containers filled with artificial saliva that contained *C. albicans* and then incubated for 11 days at 37°C. Three methods of evaluation were used to count the adhered *Candida*: direct culture, slide count, and serial dilutions.

**Results:** *C. albicans* in 1/10, 1/10², and 1/10³ dilutions showed overgrowth in group I, while overgrowth was noted only with 1/10 dilution in group III. For group III, mean colony numbers of 123, 22, 3.4, and 0 were found for the 1/10², 1/10³, 1/10⁴, and 1/10⁵ dilutions, respectively. Regarding the slide counts, group I showed a mean fungal count of 166 compared to 40 for group III with 1/10 dilution, 21 compared to 9 with 1/10² dilution, 8.6 compared to 0.7 with 1/10³ dilution, and 1.2 compared to 0 with 1/10⁴ dilution. No plates in group II showed any candidal colonies regardless of the method of evaluation (0%). These differences were statistically significant (p<0.0001).

**Conclusion:** Coating the acrylic resin dentures with Adper Single Bond Adhesive was effective in reducing *C. albicans* adhesion to dentures, while coating with 2-Octyl Cyanoacrylate adhesive completely inhibited such adhesion.

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Periodontal plastic surgery

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Periodontal plastic surgery is designed to restore the normal function and appearance of the gum, periodontal ligament and the bone that support the teeth, increase their life expectancy and usefulness. Through it, we can remove the damaged tissue caused by the periodontal disease and reconstruct. Terminal way is considered to restore the normal function. We begin first with conservative treatment and enhancing the oral hygiene and behavior and at times when conservative treatment isn't enough we do surgery. We detect the predisposing factor and precipitating factor to avoid the unwanted and increasing the awareness for early detection, seeking the medical advice and early management. Also, we detect different methods of management and when to use each one, time of recovery and post operative advice. In brief, we will talk about periodontal diseases detection, avoiding, predisposing and precipitating factors and management.

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