

Clinical and Microbial Evaluation of Visible Light Cured Acrylic Resin in Total Maxillectomy Cases

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Statement of the problem: Maximal retentive quality besides minimal changes of micro-bial flora is one of the goals for optimal clinical performance and preservation of oral structures especially in total maxillectomy cases. **Purpose:** This study examined the effect of two different types of acrylic resin on obturator retention and surface roughness as well as micro-bial proliferation on the prosthesis fitting surface. **Materials and methods:** Right total maxillectomy class IV patients were selected for this study. Maxillary obturators were constructed from heat cured acrylic resin and were used for six months. The prostheses were then rebased with visible light cured acrylic resin and were used for the following six months.

Retention and surface roughness of both appliances were evaluated. Also changes in microbial flora including aerobic bacteria and *Candida albicans* were assessed. Results: This study revealed that visible light cured acrylic resin showed encouraging results at the initial period of the study as regards retention, surface roughness and microbial flora proliferation. However by the end of the follow up period, light cured may be comparable to heat cured acrylic resin.

Conclusion: Within the limitations of this study, it could be concluded that visible light cured acrylic resin as an obturator base is comparable to heat cured resin after few months of being used in the oral environment.