

**Efficiency of Er:YAG LASER versus
Er;Cr:YSGG LASER in Veneers Debonding
with Two Materials & Thicknesses
-An in vitro study-**

Thesis

*In Partial Fulfillment of Requirements of the
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Dedication

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INTRODUCTION

Minimally invasive treatment options have become vastly used in restorative dentistry; solely depending on adhesive properties of cement and bonding systems in their retention thus, featuring a defect oriented approach rather than subtractive methods for achieving means of retention.

Patients undergoing this type of treatment require that the ceramic laminates offer clinical longevity. Nowadays, there are variety of materials that can be used in manufacture of laminate veneers, clinicians should choose a material and technique that allows the most conservative treatment; satisfies the patient's aesthetic, structural, and biologic requirements; as well as mechanical requirements to provide clinical durability.

Generally, the restoration removal process is performed by sacrificing or grinding the restoration using rotary burs rather than potentially painful and disturbing mechanical crown bridge removers. However, this process carries a risk of exceeding the restoration, and damaging underlying tooth structure, because of the lack of color contrast between tooth, adhesive resin interface, and the restoration. Also, integrity of the restoration is another matter of concern, in cases of removing the restoration a short time after the cementation because of misalignment during cementation, unexpected inflammatory pulpal responses, or veneering ceramic chipping, keeping the integrity of the restoration becomes critical to avoid re-manufacturing the restoration, and with