EFEK APLIKASI METIL METAKRILAT TERHADAP KEKUATAN PERLEKATAN GESER ANTARA KOMPOSIT DAN GIGI AKRILIK
(Penelitian Eksperimental Laboratoris)

THE EFFECT OF METHYL METHACRYLATE APPLICATION ON SHEAR BOND STRENGTH BETWEEN COMPOSITE RESIN AND ACRYLIC RESIN DENTURE TEETH
(Experimental Laboratory Research)

ABSTRACT

Background: *To repair acrylic resin denture teeth restoration using visible light composite resin needs bond strength. Adhesion of acrylic resin denture teeth to composite resin can be obtained with surface treatment. Surface treatment with application of bonding agent with prior treatment methyl metacrylate on the acrylic resin denture teeth resulted in maximum bond strength with composite resin. Whereas different wetting time of methyl metacrylate surface treatment resulted different shear bond streangth between composit resin and acrylic resin denture teeth.*

Purpose: *The purpose of this laboratory research is to study the shear bond strength of composite resin on acrylic teeth surface by methyl methacrylate surface treatment with different wetting time.*

Material and Method: *Twenty eight acrylic resin denture teeth disks without glazing with 4 mm in diameter and 2 mm in thicks were divided into 4 groups. Each group consisted of seven samples. Group I was treated with methyl methacrylate without wetting time. Group II was treated with methyl methacrylate and wetting time during 60 second. Group III was treated with methyl methacrylate and wetting time during 120 second. Group IV was treated with methyl methacrylate and wetting time during 180 second.*

Result: *The average shear bond strength in group I is 1,58 MPa, group II is 2,43 MPa, group III is 2,19 MPa, whereas that group IV is 1,71 MPa.*

Conclusion: *There is a significant difference between forth group and shear bond strength of composite resin to acrylic resin denture teeth with methyl methacrylate surface treatment during wetting time 60 second is higher than another wetting time methyl methacrylate.*

Keywords: acrylic resin denture teeth, composite resin, methyl methacrylate, shear bond streangth, surface treatment.