

DIAMETRAL TENSILE STRENGTH, SHEAR BOND STRENGTH AND SEM OF RESIN MODIFIED LUTING GLASS IONOMER MODIFIED WITH ZIRCONIA

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ABSTRACT

The present study was done to evaluate the effect of addition of zirconia powder in 1%, 2% and 3% weight on a resin modified glass ionomer. SEM, diametral tensile and shear bond strength to dentin were evaluated. It was found that, addition of 3% zirconia to the powder of glass ionomer resulted in a significant increase of diametral tensile and shear bond strength of cement to dentin. SEM showed integration of zirconia powder between the glass powder and resin matrix resulted in improvement of strength properties.

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