

Diametral Tensile Strength of five trademarks of Resin Cements

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Objective: Determine the diametral tensile strength of five trademarks of resin cements

Method: 50 specimens were fabricated from four categories: Rebilda DC. (VOCO), Dual Link (BISCO), Corposit (Nordin), Corecem (RTD), RelyX U200.(3M ESPE). The specimens were stored in an oven at a temperature of $37+/-1^{\circ}\text{C}$ and 100% humidity. They were polished and then coated with paper wrapped. The tensile strength test on compression in the testing machine is DFM5000 Ten Com Digital Force Meter (compression & testing equipment) at a speed of 0.2mm/seg until the fracture. This tensile stress is directly proportional to the compression load applied. The compressive load and traction force was exerted from the center outwards of the text body until the point of maximum resistance

Result: Individual confidence level=99.33%. Level p: 0.003; without significant differences. Homogeneous groups mean and standard deviation Were: Mean standard deviation of $\pm C1=47350.2$ (10547.1). Mean standard deviation of ± 40968 C2 = (9765.67. Mean standard deviation of $\pm C3 = 44054.4$ (7457, 07). Mean standard deviation of $\pm C4 = 44299.9$ (3420.41). Mean \pm standard deviation of C5 = 33541.4(3946.18)

Conclusion: Mechanical test performed on the resin cements can be concluded that there are no significant differences in diametral tensile strength between the samples used in this study, thus rejecting the hypothesis.

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