Pengaruh semen zinc oxide eugenol terhadap transverse strength resin akrilik jenis self-cured

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Abstrak

An experimental laboratory study has been conducted to investigate the effect of temporary zinc oxide eugenol cement on the transverse strength of self-cure acrylic resin. Two groups of resin plates 20x9x1 mm in dimensions were incorporated in the study. Each groups consisted of 31 specimens. On the first group was applied a 0.1 mm thickness of temporary zinc oxide eugenol cement on acrylic which is only partially polymerized. The time we establish here was 30 minutes, thus the zinc oxide eugenol cement was applied 30 minutes following the beginning of the mix.

After being stored in a incubator with the temperature set at 37°C for 7 days in water, all the specimens were subjected to load by Shimadzu machine with cross head speed of 0.05 inch/min- Results were analyzed with T-test showing that the two groups differed significantly. It was observed that zinc oxide eugenol cement decreases the transverse strength of self-cure acrylic resin significantly By mathematical equation, 0-03 mm increase in thickness in the experimental group might produce the same strength as the control group.