Pengaruh pH saliva terhadap kekuatan tarik diametral semen ionomer kaca modifikasi resin yang dilapisi coating agent = The effect of salivary ph on the diametral tensile strength of resin modified glass ionomer cement coated with coating agent

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Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh saliva buatan dengan pH yang berbeda-beda terhadap terhadap kekuatan tarik diametral Semen Ionomer Kaca Modifikasi Resin (SIKMR) yang dilapisi bahan pelindung varnish dan nanofilled coating agent. Spesimen yang dilapisi bahan pelindung direndam dalam saliva pH 4,5, 5,5, dan 7 selama 24 jam dalam inkubator bersuhu 37°C. Kekuatan tarik diametral diuji dengan Universal Testing Machine.

Hasil menunjukkan perbedaan yang tidak bermakna pada seluruh spesimen yang dikelompokkan berdasarkan tingkat keasaman saliva serta jenis bahan pelindung (p>0,05). Bahan pelindung varnish maupun nanofilled coating agent dapat bertahan dengan baik pada SIKMR dalam kondisi asam yang merupakan simulasi keadaan rongga mulut pada kelompok orang dengan resiko karies tinggi selama 24 jam proses maturasinya.

<hr>The aim of this study was to evaluate the effect of artificial saliva with different acidities on the diametral tensile strength of RMGIC coated with varnish and nanofilled coating agent. The specimens coated with coating agents were immersed in artificial saliva with the pH of 4.5, 5.5, and 7 for 24 hours at 37°C. The diametral tensile strength of the specimens were tested with Universal Testing Machine.

There were no significant differences on the diametral tensile strength of all specimens that were put into groups based on the acidity of the saliva and the type of coating agent (p>0.05). Both varnish and nanofilled coating agent stayed on the RMGIC in the acidic condition that simulated the true condition of oral cavity of people with high caries risk for the 24 hours of maturation.