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[\[PDF \(1199K\)\]](#) [\[References\]](#)**New glass polyalkenoate temporary cement for cement-retained implant restoration: Evaluation of elevation and retentive strength**[Jing LI](#)¹⁾, [Yoshihito NAITO](#)¹⁾, [Jian-Rong CHEN](#)²⁾, [Takaharu GOTO](#)¹⁾, [Yuichi ISHIDA](#)¹⁾, [Takanori KAWANO](#)¹⁾, [Yoritoki TOMOTAKE](#)¹⁾ and [Tetsuo ICHIKAWA](#)¹⁾

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Abstract:

The purpose of this study was to evaluate four luting agents for cement-retained implant restorations in two aspects: post-cementation elevation of the superstructure and the retentive strength before and after thermocycling and mechanical cycling. The four evaluated luting agents were: new glass polyalkenoate hard-type (GH) and soft-type (GS) cements, polycarboxylate hard-type (HH) and soft-type (HS) cements. Elevation and retentive strength were measured using a CCD laser displacement sensor and a universal testing machine respectively. Elevation increased in this order: GH, GS, HH, and HS. Thermal and mechanical stresses significantly decreased retentive strength, and the mean values exhibited by GH were significantly higher than the other luting agents. The novel glass polyalkenoate cements (hard- and soft-type) experimentally prepared in the present study augured well as luting agents by virtue of their reduced film thickness and their excellent post-cementation retention and elevation.

Key words:[Glass polyalkenoate cement](#), [Elevation](#), [Retentive strength](#)[\[PDF \(1199K\)\]](#) [\[References\]](#)

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