



SpeedCEM Plus

Ivoclar Vivadent, Inc.
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98%
rating at
recall

SpeedCEM® Plus is a self-adhesive, self-curing resin cement with a light-curing option. This cement offers an ideal combination of performance and ease of use. Its formulation has been optimized for use in conjunction with restorations made of zirconium oxide and metal-ceramics, and for the cementation of high-strength ceramics on implant abutments. Strong self-curing capabilities offer an additional measure of reliability when seating opaque restorations.

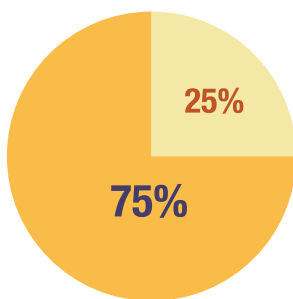
Purpose

The purpose of this study was to evaluate the clinical performance of **SpeedCEM Plus** self-adhesive resin cement after two years.

Consultants' Comments

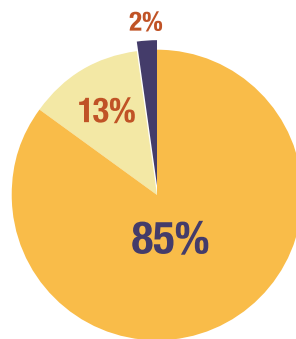
- *Retention has been excellent.*
- *No long term issues with sensitivity.*
- *I have not seen any marginal discoloration.*

Fig. 1: Age of Restorations Evaluated at Recall.



- 1-1.5 years old
- 1.5-2 years old

Fig. 2: Types of Restorations Evaluated at Two Years.



- Single crowns
- Implant crowns
- Bridges

Clinical Evaluation Protocol

A total of 136 ceramic single-unit crowns and bridges were fabricated and cemented with **SpeedCEM Plus** over a seven-month period. Of the 122 restorations recalled, 25% were 1-1.5 years, 75% were between 1.5-2 years old (Figure 1). These included single crowns (104), implant crowns (2) and bridges (16) (Figure 2). Seven percent were anterior crowns and 93% were posterior crowns. The restorations cemented with **SpeedCEM Plus** represented a wide range of material including porcelain-fused-to-zirconia, pressed and CAD/CAM lithium disilicate ceramic and full-contour zirconia.

Clinical Observations After Two Years

Lack of postoperative sensitivity

Lack of postoperative sensitivity was excellent (Figure 3). Over a two-year period, five patients experienced minor to moderate postoperative sensitivity. Two teeth had a history of extensive treatment and ultimately needed root canal treatments. Ninety-six percent of the restorations experienced no sensitivity.

Esthetics

After two years in service, clinicians noted exceptional esthetics. None of the restorations exhibited evidence of marginal discoloration related to the cement (Figure 3). Two ceramic restorations were noted as being opaque or lacking ideal esthetics at cementation. Ninety-eight percent of the crowns and bridges maintained excellent esthetics.

Resistance to Fracture/Chipping

None of the restorations cemented with **SpeedCEM Plus** fractured or chipped (Figure 3).

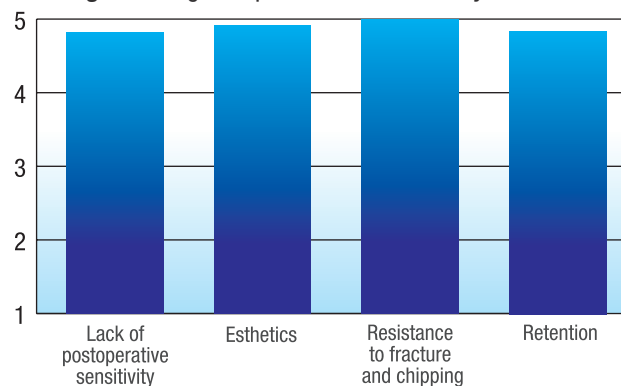
Retention

Five of the 122 restorations recalled debonded over the two-year recall period. All five were molar restorations and were attributed to the clinical conditions presented by the patient than related to the cementation system. A retention rate of 96% is excellent. (Figure 3).

Conclusions

SpeedCEM Plus has proven to be an excellent, self-adhesive resin cement. After two years in service, there was very little evidence of marginal discoloration, sensitivity or debonds. The ultimate success of a restoration is strongly dependent on the retention. **SpeedCEM Plus** is a reliable, self-adhesive resin cement and received a 98% clinical performance rating.

Fig. 3: Ratings of SpeedCEM Plus at two-year recall



Restorations were evaluated on a 1-5 rating scale:
1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent