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### **CLINICAL CASE**



# Reliable PFM crown cementation simplified with easy tack cure clean-up

A case study by Dr. Robert Margeas, DDS featuring 3M<sup>™</sup> RelyX<sup>™</sup> Luting Plus Resin Modified Glass Ionomer Cement

The patient presented to the office with pain on biting of his upper left first molar (tooth #14). The tooth had a large composite restoration and a crack going from mesial to distal. The old restoration was removed and a new build up was placed. The tooth was prepared for a full coverage PFM restoration. When doing either PFM or Zirconia restorations, I always use resin modified glass ionomer cement due to the ease of use, the retention and the easy clean up.



Fig. 1: The tooth had a large composite restoration and a crack going from mesial to distal.



Fig. 2: Prior to making the final impression a small retraction cord was placed.



Fig. 3: Then, retraction paste was injected into the sulcus to deflect the tissue and stop any bleeding (3M<sup>™</sup> Retraction Capsule).



Fig. 4: 3M<sup>™</sup> Imprint<sup>™</sup> 4 Light Body VPS Impression Material was then applied to the preparation and 3M<sup>™</sup> Imprint<sup>™</sup> 4 Heavy Body VPS Impression Material was injected into a quadrant tray and placed into the patient's mouth.



Fig. 5: The final impression.



Fig. 6: The tooth was then cleaned.



Fig. 7: Following cleaning, a provisional was made out of 3M<sup>™</sup> Protemp<sup>™</sup> Plus Temporization Material and was cemented with temporary cement. The patient was dismissed for two weeks.

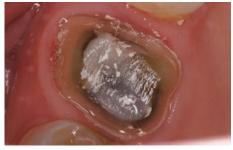


Fig. 8: Once the crown was made by the dental lab, the provisional was removed, the tooth mechanically cleaned, and the PFM was tried in for marginal integrity and contacts.

## Reliable PFM crown cementation simplified with easy tack cure clean-up cont.



Fig. 9: 3M<sup>™</sup> RelyX<sup>™</sup> Luting Plus Resin Modified Glass Ionomer Cement was injected into the crown utilizing the automix syringe delivery.



Fig. 10: The crown was firmly placed over the preparation. The margins were then cured for five seconds utilizing the 3M<sup>™</sup> Elipar<sup>™</sup> DeepCure-S LED Curing Light.



Fig. 11: The cement around the margins was easily peeled away.



Fig. 12: The patient was instructed to bite on a cotton roll for five minutes. The final restoration.



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