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3M[™] RelyX[™] Ultimate Adhesive Resin Cement – posterior crown

A case study by Dr. Carlos Eduardo Sabrosa, DDS, MSD, DScD featuring 3M[™] RelyX[™] Ultimate Adhesive Resin Cement



Fig. 1: Initial Situation with a molar tooth in need of endodontic treatment and subsequent crown placement .

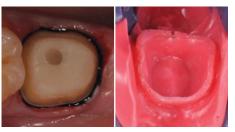


Fig. 2: Tooth preparation after post placement and core build up with a low shrink composite. Retraction in place. Impression with polyether impression materials.



Fig. 3: Temporization with 3M[™] Protemp[™] 4 Temporization Material.

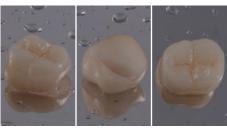


Fig. 4: Fabrication of Lithium disilicate crown (IPS e.max[®] CAD).



Fig. 5: Tooth preparation after removal of the temporary restoration and mechanical cleaning of the tooth (e.g. pumice paste). Note the healthy gingiva.

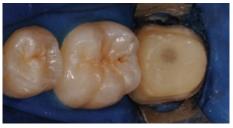


Fig. 6: Tooth preparation after rubber dam placement for isolation.



Fig. 7: Apply 3M[™] Single Bond Universal Adhesive to the bonding surface rubbing it in for 20 seconds.

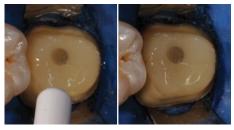


Fig. 8: Gently airthin adhesive with oil-free air for five seconds until the solvent is evaporated and no more ripples are observed.

3M[™] RelyX[™] Ultimate Adhesive Resin Cement – posterior crown cont.

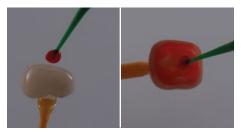


Fig. 9: Etch the crown with hydrofluoric acid after try in and rinse with water. Air dry with oil-free air.

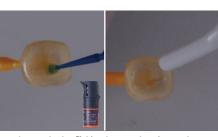


Fig. 10: Apply 3M[™] Single Bond Universal Adhesive to the bonding surface and rub it in for 20 seconds. Airthin with oil-free air for 5 seconds until the solvent is evaporated and no more ripples are observed. Avoid pooling.



Fig. 11: Dispense 3M[™] RelyX[™] Ultimate Adhesive Resin Cement directly into the crown. Firmly seat the crown under finger pressure.



(1) Tip: Do not exceed recommended tack cure time, otherwise clean up will be difficult. For a controlled time, use 3M[™] Elipar[™] 510 LED Curing Light or 3M[™] Elipar[™] DeepCure-S LED Curing Light tack curing function.

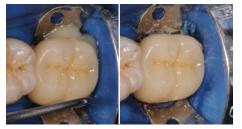


Fig. 13: Remove excess cement with a scaler. Tip: Hold the crown in place.

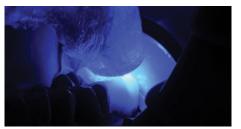


Fig. 14: Light cure for 20 seconds per surface. Finish and polish as needed.



Fig. 15: Immediate final clinical situation.



Fig. 16: Beautifully healed gingiva after three months.



3M Oral Care 2510 Conway Avenue St. Paul, MN 55144-1000 USA

Phone 1-800-634-2249 Web 3M.com/Dental

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Before using the products described, please refer to the instructions for use provided with the product packages.

The featured 3M product may be known with an alternative name in different regions.

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