3M Science. Applied to Life.™

CLINICAL CASE

Restoring function and esthetics with a single-unit, implant-based restoration

A case study by Dr. Carlos Eduardo Sabrosa, DDS, MSD, DScD featuring 3M™ RelyX™ Luting 2 Resin Modified Glass Ionomer Cement

This patient presented with a fractured root on second upper premolar, which required extraction. For best esthetics, function was restored with a customized two-piece abutment made from 3M™ Lava™ Plus High Translucency Zirconia cemented to a titanium interface. The crown was made with Lava Plus Zirconia and it was cemented onto the abutment with 3M™ RelyX™ Luting 2 Resin Modified Glass Ionomer Cement.

Fig. 1: Initial situation with the second upper premolar displaying a fractured root.

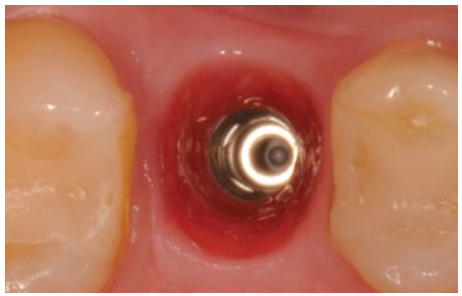

Fig. 2: The tooth was extracted and a Straumann® Bone Level Implant was placed. The picture shows the situation after stabilization of the implant and gingival contouring.

Fig. 3: A patient specific two-piece 3M™ Lava™ Plus Zirconia abutment was prepared and fit of the permanent 3M™ Lava™ Plus High Translucency Zirconia crown was checked.

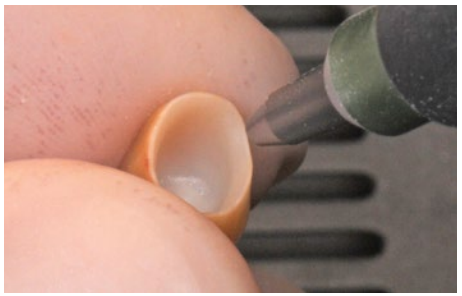

Fig. 4: The bonding surface of the crown is sandblasted with aluminum oxide (particle size 30 or 50 µm at a pressure of 2 bar (30 PSI)). Cleaning of the sandblasted surface with alcohol and oil-free air.

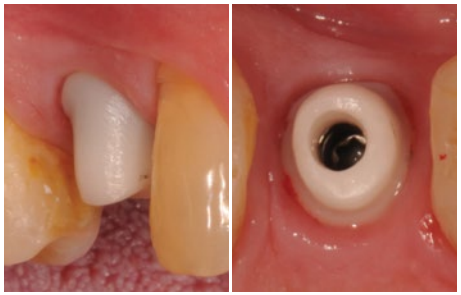

Fig. 5: Intraoral situation with the zirconia abutment in place.

Fig. 6: After applying the 3M™ RelyX™ Luting 2 Resin Modified Glass Ionomer Cement directly into the 3M™ Lava™ Plus High Translucency Zirconia crown, the crown is seated under firm finger pressure. Easy excess removal in one piece with a scaler after five seconds of tack cure.

Fig. 7: Final situation with good gingival adaptation after placement (top), and at seven year follow-up (bottom).

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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