PFM restorations
Prescribing and placing IPS InLine full-coverage crown restorations

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A 45-year-old male patient presented with two previously placed implant abutments on teeth 19 and 30 that had already been provisionalized (Fig. 1). At the time of presentation, the patient was ready to proceed with treatment planning for the definitive full-coverage crown restorations for these abutments. The teeth adjacent to each abutment had been restored, with all-ceramic crowns (IPS Empress, Ivoclar Vivadent), so a PFM system was selected that would readily match the shade of the existing restorations.

1. Determine the shade for the proposed restorations, in this case E210 for tooth 19 and E110 for tooth 30, according to the Chromascop Shade Guide (Fig. 2).

2. Remove the provisional restorations (Figs. 3 and 4), and take impressions of the abutments using Virtual light-body and heavy-body fusi- ti material (IPS InLine). The provisional restorations are removed, and the teeth are cleaned, with minimal shrinkage resulting. The full-coverage crown restorations are then contoured, textured, and glazed with the InLine paste glaze to completion (Fig. 5).

Cementation
The provisional restorations are removed, and the abutments thoroughly cleaned. For cementation, Multilink Automix Universal Adhesive Cement multi-purpose, self-hardening and dual-curing resin cement (Ivoclar Vivadent) is chosen.

1. Try-in the full-coverage IPS InLine restorations dry to verify fit, contacts, and color.

Laboratory fabrication
At the laboratory, a simple one-bake and a glaze technique is used for fabrication of the single-unit restorations; build-up and shade matching also are fabricated as easy.

The alloy framework is designed and cast for both restorations. Then, the InLine Paste Opaque is dispensed from the syringe onto the metal frameworks and fired. The dentin layer is built, after which the initial porcelain is layered onto the restorations. When completing the dentin and incisal buildup, large increments of porcelain are placed without shrinkage or loss of control. Because the porcelain is layered; however, the thinnest layers are polished, with minimal shrinkage resulting. The full-coverage crown restorations are then contoured, textured, and glazed with the InLine paste glaze to completion (Fig. 5).

2. After removal from the mouth, condition the internal aspects of the crowns, as well as the implant abutments (Fig. 7), using Multilink metal primer. Simultaneously, the Multilink Primer A and Primer B are mixed in a well. Note: The primer mix is used to further condition the abutments.

3. Apply the primer mix to the abutments, using a micro brush applicator for 30 seconds and then air-thinned for 5 seconds.

4. The base and catalyst components of Yellow Multilink Automix Universal Adhesive Cement are automatically mixed with the automixing syringe. Dispense the mixture into the syringe as as- pect of the InLine restorations directly from the applicator.

5. Saturate the restorations, allowing excess cement to be released from the margins.

6. Once initially set, remove the excess cement from the gingival margins using a scaler and then interproximally.

7. Allow the cement to set for 5 minutes, and then verify final occlusion, adjust, and polish.

The immediate post-operative view of the restoration on tooth 30 is shown (Fig. 8).