

# Crowns, Veneers, and Temporaries: Restoring a Porcelain Damaged Dentition

By Lorin Berland, DDS

**W**e all know that porcelain is harder than enamel. Occasionally we see a patient where the placement of porcelain has decimated opposing dentition. Unfortunately, this irreversible situation is most commonly found in anterior regions.

A woman came to my dental office in desperate need. She led a high-profile life and was frequently in the public eye. However, she was very self-conscious about her teeth and smile.

She had teeth Nos. 7 to 11 crowned 12 years ago to close spaces. A second set was cemented six years ago. She said they never felt correct. When she complained, her previous dentists usually ground more of the lower teeth away. She thought they looked fake in color and at the gumline. In addition, the gingiva was tender. Her chief complaint was the lower front teeth. Worn to the dentin, not only were these lower teeth unattractive, they were sensitive. Eating had become a painful chore (Fig. 1).

Any treatment for the mandibular anterior teeth would have to include the maxillary anterior teeth. Her posterior teeth were in good shape, healthy gingiva and a few amalgams. They did not exhibit the wear and attrition seen in Nos. 22 to 26. After her negative experience with crowns, she was certainly reluctant to consider crowning the lower teeth.

The patient and I agreed the best treatment would consist of a porcelain veneer on tooth No. 6, replacement Sunrise Crowns on teeth Nos. 7 to 11, and porcelain veneers on teeth Nos. 22 to 27.

Study models were mounted in the facebow on a Hanau-Mate articulator with a custom incisal guide table (Fig. 2).

The new veneers and crowns would maintain the vertical dimension supported by the posterior teeth and reestablish the proper cuspal guidance on the left side.

As sensitive as teeth Nos. 22 to 26 were, they would be more sensitive after being prepped for veneers. They would need protection. Any temporization procedure required a reduction on the palatal of the maxillary crowns. Also, because this woman led a very public life, aesthetics during the transitional phase was of great importance.

On the study models, splinted temporary Herculite A-1 veneers were fabricated for teeth Nos. 22 to 27 and a single unit for No. 6. Herculite temporary crowns were made for teeth Nos. 7 to 11. Occlusion was checked on an articulator (Figs. 3, 4 and 5). The teeth were prepped with Zekrya Gingival Protector and S5 White Bur No. 882-018 and Brasseler Porcelain Veneer Diamond Burs (No. 834-021, 6844-016, 6844-014 and 6850-014). Impressions taken with President Light and Kerr Extra Extrude Heavy and UltraDent Retraction Cord. A bite registration taken with Regal, and the temporaries were cemented. The veneer was placed with unfilled resin and spot of etched enamel. The other temporaries were cemented with Dycal cement. It dries quickly, cleans easily and I believe its calcifying effects on the exposed freshly cut dentin results in less sensitivity.

Ten days later, the veneers are cemented at one time with the Den-Mat Etch 'N Seal technique using Bisco-All Bond and PVS Universal Dual-Curing Composite. This is outlined in "A Step-by-Step Approach to Finishing Porcelain Veneers."

In a subsequent follow-up appointment, the incisal margins of the veneers were



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

etched and Bisco Fortify applied and light cured. The crowns were cemented with encapsulated Ketac-Bond.

The results can be seen in Fig. 6. A maxillary Bruxer is made.

The use of porcelain in the dental field has enabled dentists to do wonderful things. However, in terms of a patient's occlusion, too much of a good thing is not so good. In this case, crowns were originally placed for cosmetic reasons. Porcelain in malocclusion can result in aesthetic and dental

problems. In the anterior region, these defects are more obvious. Advances in dentistry carry the added responsibility of the consequences of treatment. ■

The author thanks Jackie Abelow for her assistance with this article.

L. Berland, L.: "A Step-by-Step Approach to Finishing Porcelain Veneers," *Dentistry Today*, Vol. 13, No. 8, p. 42-45.

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