

## COMMENTARY

## PREDICTABLE ESTHETICS THROUGH FUNCTIONAL DESIGN: THE ROLE OF HARMONIOUS DISCLUSION

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Dr. Brian Vence should be commended on his accurate diagnosis and treatment plan. He has described in his clinical report a conservative interdisciplinary approach to achieve not only an esthetic outcome, but more importantly, to provide a functionally sound therapy. Too often, the restorative dentist tries to satisfy the patient's desires and expectations to have a "fuller" smile by simply lengthening the maxillary anterior teeth incisally, increasing the vertical overlap with the mandibular anterior teeth. A segment of the population may tolerate this, but the result could be devastating for others. One of the most common complications in this type of case is failure of the restorative material, exemplified by fractured ceramic on the incisal edges or corners. This type of failure commonly occurs when cosmetic procedures are performed with disregard to function, or more important, the described parafunctional envelope of function. Frequently, the restorative dentist is seeking out a stronger restorative material or a better bonding agent that resists the occlusal forces. If there is a restriction in the functional or parafunctional envelope of movement, something will eventually fail, whether it is the restorative material or the biologic structures of the dentition, periodontum, or neuromuscular apparatus. The key is to design and build the restoration within each individual's own functional and parafunctional envelope of movement.

Dr. Vence has demonstrated that his clinical treatment is based on a sound review of the literature. He used orthodontic therapy to create a more ideal gingival level, and changed the horizontal and vertical overlap to flatten his angle of disclusion. Transitional composite resin was used on the incisal edges of the maxillary anterior teeth to correct the tooth form, assisting the orthodontist in achieving final tooth position and inclination. Composite resin can be used to create an excellent conservative definitive restoration, which, because of economic constraints, may be the only option for a significant segment of the population. Whether crowns or veneers are planned for structural or esthetic reasons, composite restorations can be an excellent choice for use in trial therapy before the definitive restorations are fabricated.

This case demonstrates the importance of thoughtful planning, interdisciplinary teamwork, and attention to form and function. By creating the proper anterior guidance and working within the patients' parafunctional envelope of function, the restorations should prove to be biologically, functionally, and esthetically enduring.

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