

Editorial

New Materials Complement Classic Treatment Methods

Classically, when injuries caused by deep caries lesions or trauma have been present and where significant loss of tooth structure has occurred, appropriate restoration of the teeth in question has required several distinct phases. Following endodontic therapy, a post and core tooth buildup was carried out. The tooth was then prepared to accommodate the prosthesis, which usually consisted of a full crown made of gold, porcelain-fused-to-metal, or one of the newer materials available today. The margins of the preparation were always placed on sound tooth structure to attain a ferrule effect.

In order to afford adequate tooth structure for an appropriate restoration, periodontal surgical intervention is often required to provide the necessary soft tissue dimension for the establishment of a healthy biologic width and to ensure the presence of a ferrule effect following restoration. Traditionally, these concerns meant that alveolar bone had to be reshaped to ensure a distance of 4 to 5 mm between the alveolar crest and the planned restorative margin. Such therapy could prove problematic with regard to long-term periodontal support for the treated tooth, invasion of furcation entrances in multirrooted teeth, or creation of an esthetically unsatisfying final treatment result.

Adhesive restorative therapy has altered this classic treatment approach, affording the opportunity to remove less alveolar bone, to better preserve esthetics, and to lessen the biologic and physical impact of treatment upon the patient.

These adhesive techniques afford a means by which to predictably restore a severely compromised tooth without the need for post and core therapy and, in many cases, without the need for endodontic intervention. Tooth preparation is less aggressive, employing partial coverage wherever possible.

A biologic width of only 2.5 mm is required between the alveolar crest and the planned restorative margin. This need for less alveolar reduction is more dramatic when one considers the fact that the tooth itself is prepared in a more conservative manner, with less extension apically. As a result, post-therapeutic periodontal support and furcal integrity are optimized.

As you will note in the article we have co-authored with Dr Stefano Bottacchiari (page 115 of this issue), comprehensive therapy is delivered quickly and efficiently.

In the last decade, we have treated more than 2,500 teeth with adhesive inlays and onlays in this manner. The net result of treatment has been optimization of periodontal health, preservation of tooth structure, minimization of the need for endodontic therapy, and maximization of long-term prognoses for the teeth.

The patient who is in our chair and places their trust in us must always be our prime concern and the fulcrum upon which all decisions are weighed. Therapy should be performed as simply, atraumatically, and predictably as possible. Treatment times must be shortened and therapeutic goals met with as few therapeutic insults to the patient as feasible. Patient discomfort and stress must be minimized, and therapeutic outcomes must be maximized. Newer advances in our field, when integrated appropriately into our everyday treatment armamentaria, afford us the opportunity to attain these goals on a daily basis.

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This editorial is a continuation of the editorial featured in issue 5 of 2010.