COMMENTARY

Clinical Decisions for Anterior Restorations: The Concept of Restorative Volume[1]

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Minimally invasive treatment has become a mantra for all health care providers. It has often been said that "dentistry begets dentistry." The more dentistry you perform for an individual, the more dentistry that person will be likely to need in the future. We know there is no such thing as a "permanent restoration." With future treatment a possibility for many restored teeth, it becomes apparent that the more tooth structure that can preserved, the more that will be available later.

Years ago, the only type of indirect restoration that could adequately restore significant amounts of diseased tooth structure was gold. The demand for more esthetic restorations led to the development of acrylic to gold and porcelain fused to metal restorations. These required removal of more tooth structure to allow for thickness of both metal- and tooth-colored material. The advent of all-ceramic crowns often necessitated even more removal of tooth structure for adequate strength. More involved and demanding adhesive techniques were required. The combination of more intrusive preparation and technique-sensitive bonding procedures resulted in an increased need for endodontic root-canal therapy. The public has become aware of these problems and is demanding more conservative treatment. It is not surprising that controversies abound today about prepared versus non-prepared porcelain laminate veneers.

In today's economic environment patients are seeking more economical solutions to their problems. They are challenged to afford extensive indirect procedures and are opting for simpler, less expensive direct restorations. The number of indirect procedures has reportedly decreased in North America the past 3 years. During this same period of time, several new all-ceramics restorations with increased strength have become popular. Lithium disilicate restorations and zirconia-based crowns have increased. These restorations do not require bonding but can be cemented. The all-zirconia crowns do not require as much removal of tooth structure.

This paper is one of the first to logically address the treatment decision-making process for specific treatments with regards to the amount of tooth structure that will have to be removed.[1] The factors of amount of enamel present, discoloration of underlying tooth structure, and periodontal biotypes are used to determine the restoration that achieves the desired goals while being as conservative as possible. Do the ends justify the means? Is taking away significant tooth structure justified to achieve better esthetic outcomes? This excellent review helps practitioners make appropriate decisions based on sound logic.

REFERENCE

1. Cardoso JA, Almeida PJ, Fischer A, Phaxay SL. Clinical decisions for anterior restorations: the concept of restorative volume. J Esthet Restor Dent DOI 10.1111/j.1708-8240.2012.00503.x.

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