

## COMMENTARY

## CERAMIC INLAYS: A CASE PRESENTATION AND LESSONS LEARNED FROM THE LITERATURE

Howard E. Strassler, DMD \*

This article provides valuable insight to the restorative dentist for decision making on the clinical uses of ceramic inlays. In this age of providing our patients with minimal intervention dental treatment, an adhesive, ceramic inlay is many times an excellent alternative to a full-coverage crown restoration. When evaluating the choices for a posterior tooth restoration, there are many factors that must be considered, including the amount of remaining tooth structure, surface area available for bonding, tooth position in the arch, premolars versus molars, surfaces to be restored, and occlusion. Although it has been demonstrated that conservative bonded ceramic inlays may be tooth reinforcing, high stress-bearing areas and patients with parafunctional occlusal habits may not be good candidates for these restorations.

Drs. Boushell and Ritter have provided the reader with an insightful literature review of the benefits of using ceramic inlays in one's restorative practice. Although there are many choices for partial-coverage, indirect placement, bonded tooth-colored restorations, including fritted porcelain, pressed porcelain, and CAD/CAM restorations, these restorations are not a panacea to restore all posterior teeth. The authors present the reader, through a case study, the ability to understand that not all posterior teeth in need of restoration would benefit from ceramic inlays. Premolars are better choices than molars.

Clinicians have accepted the routine use of direct composite resins to restore posterior teeth. In fact, the American Association Council of Scientific Affairs has stated that for conservative preparations, composite resin can be considered an alternative to dental amalgam. With the introduction of a variety of indirect ceramic materials for the restoration of conservative preparations, there are questions on the durability and performance of ceramics. First, as stated in this article, not all ceramics are alike. The clinician must choose a ceramic that would provide an adequate restoration for the tooth to be restored. Is the evidence from clinical trials that is currently available adequate to make these decisions? Using a case report, the authors provide the reader with a rational approach from the factors available to make the decision of when to use a ceramic inlay in an appropriate way and the specifics of preparation design and placement procedures that will provide the restoration with adequate durability. Once placed, the authors also provide the reader with an insight into what failure modes should be looked for during recall and how to best manage them.

In conclusion, ceramic inlays have a definite place in the restoration of posterior teeth. Selection of the appropriate cases will provide a clinician with long-lasting, clinically successful restorations.

*\*Professor and director of operative dentistry, Department of Endodontics, Prosthodontics, and Operative Dentistry, University of Maryland Dental School, Baltimore, MD, USA*

Copyright of Journal of Esthetic & Restorative Dentistry is the property of Blackwell Publishing Limited and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.