COMMENTARY

The Endocrown: An Alternative Approach for Restoring Extensively Damaged Molars

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Many times novel clinical procedures spring from particular individualized patient circumstances and unique clinical parameters. I suspect this was the case when the authors envisioned this case report. The authors are to be complimented for presenting this case report as it reinforces and highlights the patient-centered care concept taking into account the clinical circumstances, patient desires, age, and other social/health information.¹

In this particular clinical scenario, two obvious established restorative options were available: (1) extraction of the mandibular left first molar and placing an implant supported crown, and (2) extraction and preparing the mandibular left second premolar and the mandibular left second molar for a fixed partial denture. There is insufficient information given in the article to determine if an implant-supported crown was feasible, but of course, that was not the focus of the case report and was understandably not presented. A fixed partial denture would have required preparation of essentially sound teeth with both abutment teeth having minimal previous restorations.

The authors make a strong case with an extensive literature review for the use of a single cast core/crown ceramic restoration; however, some concerns are evident. An intimate fit is more difficult to accomplish with a single cast core/crown restoration than with a separate core and separate crown technique. Although occlusal forces are primarily in the long access of posterior teeth, lateral forces are present, and crown fractures at the level of the pulpal floor would appear to be more likely with a single cast core/crown rather than if a separate core and crown were used. This would of course result in catastrophic failure and necessitate extraction. However, in this particular case, there appears to be insufficient resistance and retentive form to utilize a separate core, hence the endocrown. Nevertheless, the long-term success of this particular restoration may be suspect because of the lack of adequate remaining tooth structure for an adequate ferrule, particularly on the facial aspect.² Although the cited study involved anterior teeth, the need for an adequate ferrule may be extrapolated to include posterior teeth.

In summary, this case report is well written, well referenced, and presents a novel solution to a difficult clinical situation. Based on the social history and existing clinical parameters, the choice of the endocrown was sound. The 3-year survival is promising, but clinicians should not consider this technique validated without further clinical trials and studies.

REFERENCES

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