

A method for bonding extracted teeth to a cobalt-chrome prosthesis

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Using a patient's extracted teeth or fixed prosthesis in an immediate replacement is not new. However, with a cobalt-chrome framework, it has been difficult or impossible to do when acrylic resin or some form of anchorage is absent.

A technique with Panavia EX (Kuraray Co. Ltd., Osaka, Japan) cement can be used to bond an extracted fixed partial denture to an existing cobalt-chrome removable partial denture (RPD) as an interim measure (Fig. 1). For this patient, the existing RPD with the immediate addition was used for 3 months until a new RPD was made. The extracted gold fixed partial denture (FPD) became debonded once in that period and was reattached. Panavia EX cement adheres best to nonprecious metals. Precious metals ideally require tin plating for maximum bond strength, which probably accounts for the debonding that occurred.

PROCEDURE

1. The root of the extracted FPD abutment was cut off with a high-speed diamond stone and the lingual surface that fits into the framework was roughened.
2. The region of the framework into which the extracted FPD was to adhere was sandblasted with 50 μ m alumina powder, washed, and dried.
3. Etching agent V from the Panavia cement kit was placed onto the framework and the extracted FPD was seated so that both were etched for 30 seconds, then washed, dried, and again etched for 30 seconds.
4. Panavia EX cement was mixed according to the manufacturer's instructions. The extracted FPD and RPD were held together for 4 minutes with a layer of Oxy-

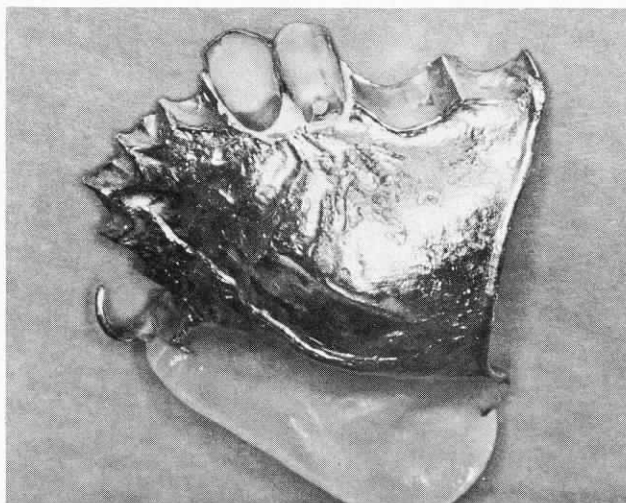


Fig. 1. Underside view of cobalt-chrome removable partial denture showing extracted fixed partial denture with root cut off and cemented with Panavia cement to prosthesis.

guard material (supplied with the Panavia cement) around the margins to produce an anaerobic atmosphere necessary for Panavia cement to set.

5. The RPD was refitted and the newly bonded FPD was trimmed so that it was not in occlusion.

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