A NEW TECHNIQUE TO MAKE TEMPORARY RESTORATIONS FOR THE SEVERELY DAMAGED ANTERIOR TEETH


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SUMMARY

The technique described below offers temporary crown for the severely damaged vital anterior teeth without resorting to emergency root canal therapy or pin.

KEY WORDS: Esthetics;Integrity;Longevity.

INTRODUCTION

It may be necessary to provide a temporary restoration for teeth with little or no remaining supragingival tooth structure. Temporary restorations have been called provisional treatment and intermediate restorations. They may be used on single or multiple preparations of the teeth. They may provide coverage for the abutment teeth as a part of a fixed partial denture prior to the placement of the permanent prosthesis. Temporary restoration may function for the extended periods of time while adjunctive treatment is performed such as periodontics, endodontics, and orthodontics. It is advisable to obtain the best possible marginal
adaptation.

Two methods are usually introduced for the temporary treatment of the teeth with severe damage:

1. Placing a pin to provide retention for the temporary.
2. Performing an elective endodontic treatment and making a temporary by using the root canal space for retention.

**TECHNIQUE**

A technique is presented in this article that will provide temporary coverage for a vital anterior tooth with little remaining clinical crown. The restoration satisfies the esthetic, phonetic, and functional requirements necessary in a provisional or temporary restoration for the anterior teeth.

**LATERAL INCISOR WITH HYPOPLASIA**

1. Evaluate the tooth for vitality; provide anesthesia for the removal of the residual caries (Fig. 1).

2. Provide minimum reduction with a small diameter flame-shaped diamond stone. Extend the preparation as far subgingivally as it is appropriate without violating the epithelial attachment.

3. Select a stock copper band. The Copper band must be forced over the remaining root form. Success of the retention depends on the tight fit of the band over the prepared tooth (Fig. 2).

4. Place the copper band on the tooth partially and mark the gingival contour with an explorer. Trim and festoon the gingival aspect of the copper band to follow the contour of the prepared finish line.

5. Make vertical cuts in the occlusal aspects of the copper band to form tabs approximately 2 mm long (Fig. 3).

6. Perforate the tabs and supragingival portion of the band with a small diameter bur to provide retention for the composite that will be used to form the temporary crown.

7. Fold the tabs inward over the prepared tooth (Fig. 3) and burnish the band to provide the best adaptation.

8. Select celluloid crown with the appropriate size and trimmed gingival margin (Figs. 4, 5). Fill the inside of the adapted copper band and the celluloid crown. Seat the band and then the celluloid crown over the tooth accurately and allow the composite to polymerize. When the composite has polymerized, remove the crown with the copper band base from the tooth.

9. Trim the temporary restoration carefully. The composite should not extend to the gingival margin of the copper band. Adjust the occlusion and contour.
Fig. 1. Lateral incisor with hypoplasia

Fig. 2. Select a stock copper band
Fig. 3. Vertical cuts and perforation to provide retention for the composite

Fig. 4. Select celluloid crown with the appropriate size
Fig. 5. Fill the inside of the celluloid crown

10. Finish and polish the temporary restoration. A zinc oxide eugenol temporary cement is preferred. After the cement has been mixed, a small drop is picked up with a brush and placed in the occlusal or incisal of the restoration. By using this method, excessive amount of cement is avoided and the time required for the cement to be removed is diminished. The lubricant applied on the outer aspect of the restoration will also decrease the time required for removing the cement (Fig. 6).

If the margins of the temporary crowns must be placed subgingivally, the use of a 10% tetracycline temporary band cement may deter the gingivitis that may occur as a result of plaque formation in the ill-fitted crowns.

In the technique presented, we are able to use any kind of the temporary cement because the fitness is excellent.

ADVANTAGES

1. Esthetics. We are able to choose different colors of composite to match with others.

2. Strength. Composite with copper band provides enough strength.

3. Fitness. A good fit, in the finish line, is achieved by using a copper band.
REFERENCES


