

TIPS FROM OUR READERS

Fabricating short-term interim restorations from edentulous tissue conditioner material



Remi Elkattah, DDS,^a Jae Seon Kim, DDS, MSD,^b Jimmy Londono, DDS,^c and Gerard Chiche, DDS^d

The fabrication of interim restorations is a critical step in fixed prosthodontic treatment.^{1,2} In an extensive treatment, creating proper margins and adequate emergence profiles requires time and precision.^{3,4} However, if a rehabilitation appointment needs to be shortened unexpectedly and the relined interim shell still needs to be refined, the use of a short-term interim restoration is convenient for both the patient and clinician. This article describes a technique for fabricating a rapid and esthetic short-term interim device from a tissue conditioner and a vacuum-formed matrix.

This alternative method comforts patients who are self-conscious and concerned about their dental esthetics during short intermissions such as lunch or lengthy breaks. It can also be used for those who do not tolerate long visits, allowing them to return on the following day so that overnight laboratory adjustments of the interim or of the definitive restorations can be completed. It is a useful and good backup technique for patients with fragile interim restorations likely to fail and is readily available in case of unscheduled emergencies.

Tissue conditioning material is easy to mix, manipulate, and remove. Furthermore, the substance (Coe-Comfort; GC America) is white and reasonably simulates the natural dentition in the short term. It also covers the prepared teeth and minimizes their sensitivity. Because this material is used traditionally for tissue conditioning, it is biocompatible and not harmful to the gingival tissue. However, it should not be kept in place for more than 1 week because it may depress the interdental papillae when it hardens.⁵

PROCEDURE

1. Complete a diagnostic waxing (Fig. 1), reproducing the requirements of the definitive restoration.
2. Duplicate the waxing with a polyvinyl siloxane impression material (Extrude; Kerr Corp).
3. Prepare a duplicate cast with Type IV dental stone (UltiRock; Whip Mix Corp).
4. Before the preparation appointment, fabricate a vacuum-formed matrix on the duplicate cast⁶ (Clear Splint Biocryl, 0.75 mm; Great Lakes Orthodontics).
5. Trim the device at the gingival margins of the facial surface (Fig. 2) and round any sharp edges with a no. 25 Bard-Parker blade (Aspen Surgical



Figure 1. Diagnostic waxing.

^aEsthetic Fellow, Goldstein Center for Esthetic and Implant Dentistry, Department of Prosthodontics, College of Dental Medicine, Georgia Regents University, Augusta, Ga.

^bAssistant Professor, Department of Oral Rehabilitation, College of Dental Medicine, Georgia Regents University, Augusta, Ga.

^cAssistant Professor, Department of Oral Rehabilitation, College of Dental Medicine, Georgia Regents University, Augusta, Ga.

^dProfessor and Director, Goldstein Center for Esthetic and Implant Dentistry, Department of Prosthodontics, College of Dental Medicine, Georgia Regents University, Augusta, Ga.



Figure 2. Vacuum-formed matrix on duplicate cast.



Figure 3. Loading tissue conditioner in trimmed matrix.



Figure 4. Intraoral view of device.

Products). Maintain support available from lingual/palatal tissue areas to provide a vertical stop.

6. Mix white tissue conditioner material (Coe-Comfort) according to the manufacturer's recommendations.
7. Cut off the tip of a disposable syringe (Monoject Curved Tip Syringe; Kendall Healthcare).
8. Place the mixture in the syringe and load the trimmed matrix (Fig. 3).
9. Place the matrix on the prepared teeth.
10. Remove excess material intraorally with an explorer and/or a composite resin placement

instrument and extraorally with a no. 25 Bard-Parker blade or a tungsten carbide bur mounted on a straight handpiece.

11. Allow adequate time for setting before excessive manipulation, and instruct the patient in appropriate care and hygiene measures (Fig. 4).

REFERENCES

1. Yuodelis RA, Faucher R. Provisional restorations: an integrated approach to periodontics and restorative dentistry. *Dent Clin North Am* 1980;24:285-303.
2. Spoor R. Predictable provisionalization: achieving psychological satisfaction, form, and function. *Pract Proced Aesthet Dent* 2004;16:433-40.
3. Rieder CE. Use of provisional restorations to develop and achieve esthetic expectations. *Int J Periodontics Restorative Dent* 1989;9:122-39.
4. Regish KM, Sharma D, Prithviraj DR. Techniques of fabrication of provisional restoration: an overview. *Int J Dent* 2011;2011:134659.
5. Elsemann RB, Cosme DC, Souto AA, da Silva DF, de Mello JS, Shinkai RS. Degradation of tissue conditioners in complete dentures: an in situ study. *Int J Prosthodont* 2008;21:486-8.
6. Fiasconaro JE, Sherman H. Vacuum-formed prostheses. I. A temporary fixed bridge or splint. *J Am Dent Assoc* 1968;76:74-8.

Corresponding author:

Dr Remi Elkattah
Georgia Regents University
College of Dental Medicine
1430 John Wesley Gilbert Dr
Augusta, GA 30912
Email: remi.elkattah@gmail.com

Copyright © 2015 by the Editorial Council for *The Journal of Prosthetic Dentistry*.