PRACTICAL CLINICAL COURSES

A Service of the Gordon J. Christensen
Career Development Program

V1928
Effective Provisional Restorations

Gordon J. Christensen, DDS, MSD, PhD

Materials Included

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Gordon J. Christensen

PRACTICAL CLINICAL COURSES

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Gordon J. Christensen

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V1928 Effective Provisional Restorations

Presented by: Gordon J. Christensen, DDS, MSD, PhD

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   www.dentsply.com

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    Ventura, CA 93003
    (805)644-4892
    biocompltd@aol.com

13. **GC Crowntek**
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    Alsip, IL 60803
    (800)323-3386
    (708)597-0900
    www.gcamerica.com

14. **Gelfoam Sponge**
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    Morris Plains, NJ 07950
    (800)223-0182
    (973)385-0000
    www.prodhelp.com

15. **Gold Anodized Temporary Crowns**
    3M ESPE Dental Products
    3M Center
    Bldg. 275-02-SE-03
    St. Paul, MN 55144-1000
    (800)634-2249
    (651)575-5144
    www.3mespe.com

16. **Gorgeous Temp**
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17. **Integrity Temporary Crown & Bridge Material**
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18. **Jet**
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20. **Madame Butterfly**
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22. **Minute Stain**
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27. **Patient Presentation Model**
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34. **Revotek LC**
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39. **TempBond**
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42. **TempoCem**
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43. **TempSpan**
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44. **Trim**
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PROGRAM

V1928 Effective Provisional Restorations

CLINICIAN RESPONSIBLE

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GOALS & OBJECTIVES

At the completion of this video presentation, participants should be able to accomplish the following:

1. Discuss the importance of provisional restorations (PR).
2. Discuss the role of staff members in making PR.
3. List the characteristics of an ideal PR.
4. Describe what a PR must accomplish.
5. Discuss prefabricated PR.
6. Discuss custom-made PR.
7. Discuss laboratory-made PR.
8. Compare the various chemical compositions of resin used for PR.
9. Discuss and compare several methods to make a single-tooth PR.
10. Make a PR for a single-tooth preparation and a three-unit fixed prosthesis.
11. Discuss PR for inlays and onlays.
12. Make a PR for an inlay or onlay.
13. Discuss and list the steps for reinforcing a three-unit PR.
14. Discuss making a multi-unit PR and make a three-unit PR.
15. Compare having a laboratory make a long-span PR shell vs. making the PR shell in your office.
16. Compare provisional cements.
17. Discuss the negative effects related to long-term use of PR.
18. List several negative factors in final restorations that can be related to PR.
19. Discuss dealing with PR breakage and how to prevent it.
20. Discuss the importance or lack of importance of esthetic considerations in PR.

OVERVIEW

V1928 Effective Provisional Restorations

Provisional restorations (PR) are an important step in making crowns and fixed prostheses. Often PRs contribute to negative characteristics in final restorations. Staff members can be educated to make excellent PRs, and delegating this task is legal in most geographic locations. When staff members make PRs, the time savings is highly significant. As much time is required to make an adequate PR as to accomplish the tooth preparations and make the impressions. There are many types of PRs available to practitioners, and the type of PR selected by a specific practitioner is directly related to the opinions and needs of the dentist. An ideal PR has the following characteristics:

- Occlusion not too high or low
- Contact areas tight
- Margins closed
- Color similar to remaining teeth
- Anatomy similar to that desired for the final restoration

The described characteristics can be achieved by using different methods. This presentation describes and compares the several methods to make adequate PR for single-tooth restorations, three-unit fixed prostheses, and multi-unit full-arch restorations. The several types of resin described and compared for PR are:

- PMMA – polymethyl methacrylate
- PEMA – polyethyl methacrylate
- PVEMA – polyvinylethyl methacrylate
- MEMA – methylethyl methacrylate
- BIS-Acryl

The following negative factors and how to avoid them are discussed:

- Long-term use of PR
- PR breakage during service
- Wear of PR
- Resin discoloration during service
- Occlusion too high or too low
- Loose contact areas
- Open margins
- Over contoured PR
- Tooth sensitivity during PR service
- PR coming off during service
- Provisional cement dissolution

OVERVIEW (Cont'd)

V1928 Effective Provisional Restorations

The controversy concerning eugenol containing vs. non-eugenol containing provisional cements is discussed. Either may be used with success, but eugenol containing provisional cements are well known to produce less tooth sensitivity during service of the PR than non-eugenol containing provisional cements. How to educate staff members to make PR is discussed and emphasized. Educating patients about the short-term characteristics of PR is very important to them accepting the temporary nature of PR and to long-term restoration success.

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2. Christensen GJ. Why expand the role of dental staff members? JADA 2001; 132:529-31.
3. Christensen GJ. Improving quality and speed in providing fixed prosthodontics. JADA 2004; 135:333-35.
4. Christensen GJ. Making provisional restorations easy, predictable and economical. JADA 2004; 135:625-27.
5. Kim Y, Yamashita J, Shotwell J, Chong K, Wang H. The comparison of provisional luting agents and abutment surface roughness on retention of provisional implant-supported crowns. The Journal of Prosthetic Dentistry. 2006 Jun;95(6):450-455.
6. Lieu C, Nguyen TM, Payant L. In vitro comparison of peak polymerization temperatures of 5 provisional restoration resins. J Can Dent Assoc. 2001;67:36-9.
7. Nivedita S, Prithviraj DR. A comparative study to evaluate the marginal accuracy of provisional restorations fabricated by light polymerized resin and autopolymerized resin: a scanning electron microscope study. J Indian Prosthodont Soc. 2006;6(3):122-7.
8. Rego M, Santiago L. Retention of provisional crowns cemented with eight temporary cements. Comparative study. Journal of Applied Oral Science. 2004 Jul/Sep;12(3) Bauru.
9. Wassell RW, St. George G, Ingledew RP, Steele JG. Crowns and other extra-coronal restorations: provisional restorations. British Dental Journal. 2002 Jun;192(11):619-30.

POST TEST

V1928 Effective Provisional Restorations

1. Dental assistants making provisional restorations can:
- ☐ a. become very proficient with the technique.
- ☐ b. expand their usefulness to the practice.
- ☐ c. rapidly gain the confidence of patients.
- ☐ d. all of the above.

2. A good provisional restoration:
- ☐ a. has the same level of occlusal contacts as the adjacent teeth.
- ☐ b. exactly matches the color of the adjacent teeth.
- ☐ c. fits the margin with no more than 1.0 mm of opening.
- ☐ d. is under contoured to reduce occlusal forces.

3. Prefabricated provisional restorations:
- ☐ a. usually exactly fit gingival margins before lining.
- ☐ b. are all made of polyethyl methacrylate.
- ☐ c. have roughened internal surfaces for retention.
- ☐ d. usually require relining with resin before cementation.

4. The most commonly used provisional resin type usually does not have:
- ☐ a. low exotherm.
- ☐ b. low polymerization shrinkage.
- ☐ c. high filler content.
- ☐ d. more than one color.

5. The suggested material for inlay/onlay provisional restorations:
- ☐ a. is a polymethyl methacrylate resin.
- ☐ b. is a polyethyl methacrylate resin.
- ☐ c. is a BIS-GMA resin.
- ☐ d. is a modified microfill resin.

6. Provisional restorations should be reinforced with fibers:
- ☐ a. always.
- ☐ b. occasionally.
- ☐ c. never.
- ☐ d. only if over 3 units.

7. Currently, the most popular type of resin used for provisional restorations is:
- ☐ a. BIS-Acryl.
- ☐ b. PMMA.
- ☐ c. PEMA.
- ☐ d. modified microfill.

POST TEST (CONT'D)

V1928 Effective Provisional Restorations

8. One of the best ways to fabricate a long-span provisional restoration is to line previously set _____ with _____.

☐ a. PEMA with PMMA
☐ b. PMMA with PEMA
☐ c. BIS-Acryl with PEMA
☐ d. none of the above

9. If a provisional restoration is too low when cemented, the final restoration will likely be:

☐ a. too high.
☐ b. too low.
☐ c. just right.
☐ d. open on the contact areas.

10. When a prepared tooth is allowed to serve without a provisional restoration, the result will probably be:

☐ a. tooth sensitivity.
☐ b. tooth extrusion.
☐ c. inadequate contact areas when the final restoration is seated.
☐ d. all of the above.

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