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V1931

Predictable Fixed and Removable Prosthodontic Impressions

Gordon J. Christensen, DDS, MSD, PhD

Materials Included

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

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PROGRAM

V1931 Predictable Fixed and Removable Prosthodontic Impressions

CLINICIAN RESPONSIBLE

Gordon J. Christensen, DDS, MSD, PhD

CEO, Practical Clinical Courses

CEO, CR Foundation

Practicing Prosthodontist, Provo, Utah

GOALS & OBJECTIVES

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

1. Describe the importance of accurate dental impressions.
2. List 5 reasons for impression failure.
3. Describe how inadequate tooth preparations can influence impressions.
4. List the steps in the two-cord soft-tissue management technique.
5. Discuss the differences in potential impression accuracy between stock trays and custom trays.
6. Describe use of tray adhesive for polyether.
7. Describe use of tray adhesive for vinyl polysiloxane.
8. List the advantages for double-arch impressions.
9. List the disadvantages for double-arch impressions.
10. List the advantages for stock full-arch trays.
11. List the disadvantages for stock full-arch trays.
12. List the advantages for custom full-arch trays.
13. List the disadvantages for custom full-arch trays.
14. Discuss potential negative affects when using laser or electrosurgery for soft- tissue management.
15. List the steps in the "fake split cast impression procedure" for removable partial denture impressions.
16. List the steps in the dual impression complete denture technique.
17. Describe the ideal characteristics of an adequate custom impression tray for a removable partial denture.
18. Describe the ideal characteristics of an adequate custom impression tray for complete dentures.
19. Compare the characteristics of polyether vs. vinyl polysiloxane.
20. Predict the future for dental impressions.

OVERVIEW

V1931 Predictable Fixed and Removable Prosthodontic Impressions

Oral impressions for crowns, fixed prostheses, removable partial dentures, and complete dentures are necessary many times during a typical operating day for almost all dentists. Although there have been several types of impression materials used over the past 50 years, currently two types dominate the market – polyether and vinyl polysiloxane (VPS), which is also named addition reaction silicone.

Vinyl polysiloxane has excellent characteristics including:

- Extreme accuracy
- Excellent elastic recovery
- Impermeability, allowing disinfection in liquids
- Long-term stability, allowing repouring
- No objectionable taste or odor
- Many colors and viscosities

Polyether also has excellent characteristics including:

- Extreme accuracy
- Near perfect surface detail reproduction
- Better hydrophilicity than vinyl polysiloxane
- Fast setting tray adhesive
- Good elastic recovery
- A snap set, allowing more working time before the memory of the material starts
- However, is not as stable over a long time as VPS

These two material categories are among the best of all dental materials. They satisfy nearly all dental impression needs, when used properly. However, often they are not used to an optimum level.

This presentation includes the following live clinical impression demonstrations for:

- crowns using a double-arch quadrant tray with polyether.
- crowns using a stock full-arch tray with vinyl polysiloxane.
- crowns using a custom resin light-curing tray with vinyl polysiloxane.
- removable partial dentures using a custom resin light-curing tray with vinyl polysiloxane.
- complete dentures using a custom resin light-curing tray with polyether.

The potential future of dental impressions is discussed. It is predicted that digital impressions will become used more, and that the change from the current elastomers, polyether and vinyl polysiloxane, will require only a few years.

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POST TEST

V1931 Predictable Fixed and Removable Prosthodontic Impressions

1. In the "two-cord" tissue management procedure for crowns and fixed prostheses:
 - a. the first cord is placed before cutting the tooth.
 - b. ferric sulfate styptics are always used.
 - c. the first cord is placed after the initial gross tooth preparation.
 - d. none of the above.

2. When using the "two-cord" tissue management procedure for crowns and fixed prostheses:
 - a. the second cord remains in place during the impression.
 - b. the first cord remains in place during the impression.
 - c. both cords remain in place during the impression.
 - d. the cords are often inadvertently caught by the bur or diamond and removed during treatment.

3. Custom light-curing full-arch impression trays require _____ impression material than stock trays.
 - a. more
 - b. less
 - c. about the same
 - d. more viscous

4. Adhesives for polyether are _____ those for vinyl polysiloxane.
 - a. worse than
 - b. better than
 - c. the same as
 - d. slower setting than

5. Double-arch impressions:
 - a. are less accurate than full-arch impressions.
 - b. are more accurate than full-arch impressions.
 - c. have the same or better accuracy as full-arch impressions.
 - d. require adhesive for stability.

6. In the "fake split cast" custom impression technique for removable partial dentures:
 - a. the edentulous spaces are blocked out before making the tray.
 - b. the tray is extended exactly to the mucobuccal fold.
 - c. the teeth are blocked out before making the tray.
 - d. both the teeth and the edentulous spaces are blocked out before making the tray.

7. When the initial border molding for removable partial denture or full-denture trays using elastomer impressions is accomplished, _____ body material is used.
 - a. putty
 - b. light
 - c. it makes no difference which
 - d. heavy

POST TEST (CONT'D)

V1931 Predictable Fixed and Removable Prosthodontic Impressions

8. The Pentamix™ 3 has which desirable characteristic?
 - a. minimal waste
 - b. simplicity of use
 - c. relatively high speed
 - d. all of the above

9. The dual-impression technique for complete dentures:
 - a. uses heavy body material as the first impression.
 - b. places the first application of impression material only on the borders.
 - c. must have a relieved cast before making the tray.
 - d. all of the above.

10. The type of material suggested for dual-impression complete denture impression trays is:
 - a. stock metal or plastic trays.
 - b. thermoplastic resin trays.
 - c. polymethyl methacrylate trays.
 - d. light-curing resin trays.

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