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V1980
Foolproof, Fast Single Crown Procedure

Gordon J. Christensen, DDS, MSD, PhD

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PRACTICAL CLINICAL COURSES

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www.coltene.com
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www.premierdentalco.com
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www.kerrdental.com

47. **TRIOS Intraoral Scanner**
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51. **VITA Toothguide 3D-Master**
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PROGRAM

V1980 Foolproof, Fast Single Crown Procedure

CLINICIAN RESPONSIBLE:

Gordon J. Christensen, DDS, MSD, PhD

Founder and CEO, Practical Clinical Courses

Senior Consultant & Previous CEO, CR Foundation

Practicing Prosthodontist, Provo, Utah

GOALS & OBJECTIVES

At the completion of this video presentation, viewers should be able to:

1. Discuss the importance of fixed prosthodontics to dental practice service and revenue.
2. Describe “real-world” fixed prosthodontics.
3. List three ways to make a crown.
4. List the dentist tasks in each of the three ways.
5. List the assistant tasks in each of the three ways.
6. Compare the characteristics of the five most commonly used types of crowns.
7. Describe the timing of shade selection for crowns and how to best transfer color to technicians.
8. Describe making a provisional restoration as shown in this video.
9. Describe when the first cord is placed in the two-cord technique.
10. Describe when the second cord is placed.
11. Discuss the difference between fillers and build-ups.
12. Discuss the use of pure titanium retentive pins.
13. Draw the differences in a tooth preparation design for a zirconia crown and a lithium disilicate crown.
14. List the steps in a scanned impression.
15. List the steps in a conventional impression with vinyl polysiloxane or polyether.
16. Discuss tooth disinfection and tooth desensitization.
17. List the three main types of cements discussed in this video.
18. Describe the advantages of full-zirconia crowns.
19. Describe the advantages of lithium disilicate crowns.
20. Describe postoperative follow-up for crowns.

OVERVIEW

V1980 Foolproof, Fast Single Crown Procedure

Fixed prosthodontics is a major part of general dentistry and the prosthodontic specialty. There is enormous change taking place in this clinical area, since the incorporation of scanning and milling into both dental laboratories and clinical offices.

In spite of the significant changes taking place in dental laboratories, conventional clinical procedures still dominate actual clinical treatment by an overwhelming amount.

Most general dentists treat patients with crowns or fixed bridges on almost every clinical day, with an estimated average of more than 20 to 30 units per month. The clinical procedures must be relatively simple, fast, and predictable. Those characteristics are the purpose of this video. The following subjects are included in the presentation:

- The importance of fixed prosthodontics (crowns and bridges) in your practice
- Making fixed prosthodontic procedures fast, easy, better, less expensive, and predictable
- Dentist tasks in the procedure
- Assistant tasks in the procedure
- Crown fabrication in-lab or in-clinical office
- A comparison of current crown types
- Shade selection
- Impression for provisional restoration
- Anesthetic
- Initial tooth preparation
- Final tooth preparation
- Fillers, build-ups, or nothing
- Tissue management
- Digital impressions
- In-office CAD/CAM
- Conventional impressions
- Provisional restorations
- Laboratory
- Anesthetic
- Tooth disinfection and desensitization
- Cements
- Cementing fixed prostheses
- Postoperative follow-up and recare

Following the information presented in this video will greatly simplify a typical dentist's procedure for crowns!

SUPPLEMENTAL MATERIALS

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1. Luo XP, Yuan Y, Shi YJ, Qian DD. A ten-year clinical study of cracked teeth restored with glass ceramic crowns. *Zhonghua Kou Qiang Yi Xue Za Zhi*. 2016 Oct 9;51(10):583-586. doi: 10.3760/cma.j.issn.1002-0098.2016.10.002.
2. Anchieta RB, Machado LS, Hirata R, Coelho PG, Bonfante EA. Survival and failure modes: platform-switching for internal and external hexagon cemented fixed dental prostheses. *Eur J Oral Sci*. 2016 Oct;124(5):490-497. doi: 10.1111/eos.12298. Epub 2016 Sep 29.
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10. Bömicke W, Rues S, Hlavacek V, Rammelsberg P, Schmitter M. Fracture Behavior of Minimally Invasive, Posterior, and Fixed Dental Prostheses Manufactured from Monolithic Zirconia. *J Esthet Restor Dent*. 2016 Aug 26. doi: 10.1111/jerd.12242. [Epub ahead of print]
11. Ahlholm P, Sipilä K, Vallittu P, Jakonen M, Kotiranta U. Digital Versus Conventional Impressions in Fixed Prosthodontics: A Review. *J Prosthodont*. 2016 Aug 2. doi: 10.1111/jopr.12527. [Epub ahead of print]
12. Shin H, Ko H, Kim M. Cytotoxicity and biocompatibility of Zirconia (Y-TZP) posts with various dental cements. *Restor Dent Endod*. 2016 Aug;41(3):167-75. doi: 10.5395/rde.2016.41.3.167. Epub 2016 May 30.

SUPPLEMENTAL MATERIALS (CONT'D)

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13. Alkudhairy FI, Bin-Shuwaish MS. The effect of sodium hypochlorite and resin cement systems on push-out bond strength of cemented fiber posts. *Pak J Med Sci.* 2016 Jul-Aug;32(4):905-10. doi: 10.12669/pjms.324.10235.
14. Vadapalli SB, Atluri K, Putcha MS, Kondreddi S, Kumar NS, Tadi DP. Evaluation of surface detail reproduction, dimensional stability and gypsum compatibility of monophase polyvinyl-siloxane and polyether elastomeric impression materials under dry and moist conditions. *J Int Soc Prev Community Dent.* 2016 Jul-Aug;6(4):302-8. doi: 10.4103/2231-0762.186795.
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24. Alikhasi M, Siadat H, Beyabanaki E, Kharazifard MJ. Accuracy of Implant Position Transfer and Surface Detail Reproduction with Different Impression Materials and Techniques. *J Dent (Tehran).* 2015 Oct;12(10):774-83.

POST-TEST

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1. About _____ percent of the fixed prosthodontic procedure can be legally delegated to educated, motivated staff persons.
 - a. 20
 - b. 30
 - c. 40
 - d. 50

2. _____ crowns are currently used the most in the USA.
 - a. Full-zirconia
 - b. Lithium disilicate
 - c. Zirconia-based
 - d. PFM
 - e. Metal

3. Shade selection for crowns should be done:
 - a. after delivering anesthetic.
 - b. before delivering anesthetic.
 - c. after tooth preparation.
 - d. doesn't matter when.

4. Fillers are used to:
 - a. increase retention.
 - b. fill a hole.
 - c. both a and b.
 - d. none of the above.

5. When using the suggested two-cord technique, the first cord is placed:
 - a. just before making the impression.
 - b. after placing the fillers and build-ups.
 - c. it doesn't matter when.
 - d. after the initial tooth preparation.

6. Digital impressions:
 - a. can be sent to the lab by email.
 - b. are usually more accurate than conventional impressions.
 - c. have no problems with infection control.
 - d. all of the above.

7. It was suggested in this presentation to use _____ viscosity in the syringe to avoid blowing it off.
 - a. light
 - b. medium
 - c. heavy
 - d. a special intermediate viscosity material

POST-TEST (CONT'D)

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8. _____ is the most popular type of cement in dentistry in North America.
- a. Resin
 - b. Resin-modified glass ionomer
 - c. Glass ionomer
 - d. Self-adhesive resin
9. When using glutaraldehyde disinfectant and desensitizer, a light coat of the material is placed on the tooth for two _____ applications.
- a. 30 second
 - b. 90 second
 - c. 60 second
 - d. 120 second
10. Some brands of resin-modified glass ionomer cement:
- a. are cariogenic.
 - b. have glutaraldehyde in them.
 - c. have a slight light-cure characteristic.
 - d. are stronger than resin cement.

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