# PRACTICAL CLINICAL COURSES

A Service of the Gordon J. Christensen Career Development Program

# V1921 Cementing Restorations – Proven & Successful!

Gordon J. Christensen, DDS, MSD, PhD Valinda Johnston, CDA, CPT

# **Materials Included:**

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AGD Post-Test

# Gordon J. Christensen PRACTICAL CLINICAL COURSES

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#### Gordon J. Christensen

# **PRACTICAL CLINICAL COURSES**

Sources of Products Discussed in

# V1921 Cementing Restorations – Proven & Successful!

Presented by Gordon J. Christensen, DDS, MSD, PhD & Valinda Johnston, CDA, CPT

#### 1. 1931 Beaver Bur (Midwest)

Dentsply Sirona 13320-B Ballantyne Corporate Place Charlotte, NC 28277 (844)848-0137 www.dentsplysirona.com

#### 2. Calibra

Dentsply Sirona 13320-B Ballantyne Corporate Place Charlotte, NC 28277 (844)848-0137 www.dentsplysirona.com

#### 3. C&B-Metabond

Parkell, Inc. 300 Executive Drive Edgewood, NY 11717 (800)243-7446 (631)249-1134 www.parkell.com

#### 4. Ceka Bond

Preat Corporation 2625 Skyway Drive Suite B Santa Maria, CA 93455 (800)232-7732 www.preat.com

#### 5. Ceramir C&B

Doxa Dental Inc. 150 N. Michigan Avenue Suite 1950 Chicago, IL 60601 (855)369-2872 www.ceramirdental.com

#### 6. ClearTemp LC

Ultradent Products Inc. 505 W. Ultradent Drive South Jordan, UT 84095 (888)230-1420 www.ultradent.com

# 7. Dentapops

Primotec, Inc. 5616 Campanile Way San Diego, CA 92115 (916)849-2637 www.dentapops.com

#### 8. **Durelon**

Solventum 2510 Conway Avenue St. Paul, MN 55144 (855)423-6725 (612)842-1263 www.3m.com

#### 9. EsteCem II

Tokuyama Dental America, Inc. 740 Garden View Court Suite 200 Encinitas, CA 92024 (877)378-3548 (760)942-7211 www.tokuyama-us.com

# 10. Fleck's Zinc Phosphate Cement Local Distributors

### 11. F-TX Locators

Zest Dental Solutions 2875 Loker Avenue East Carlsbad, CA 92010 (800)262-2310 (442)244-4835 www.zestdent.com

#### 12. GC Fuji I

GC America Inc. 3737 West 127<sup>th</sup> Street Alsip, IL 60803 (800)323-7063 (708)597-0900 www.gcamerica.com

# 13. GC FujiCEM 2 Automix

GC America Inc. 3737 West 127<sup>th</sup> Street Alsip, IL 60803 (800)323-7063 (708)597-0900 www.gcamerica.com

# 14. GC FujiCEM Evolve

GC America Inc. 3737 West 127<sup>th</sup> Street Alsip, IL 60803 (800)323-7063 (708)597-0900 www.gcamerica.com

# 15. **G5 All-Purpose Desensitizer** (Clinician's Choice)

Henry Schein, Inc. 135 Duryea Road Melville, NY 11747 (800)472-4346 (631)843-5500 www.henryschein.com

#### 16. GLUMA Desensitizer

Kulzer North America 4315 S. Lafayette Blvd. South Bend, IN 46614 (800)431-1785 www.kulzerus.com

#### 17. Infinix

Nobio Ltd.
Ornat House
8 Hamatechet Street
Kadima, Israel 6092000
(844)463-4649
www.infinix.com

#### 18. Insure

Cosmedent, Inc. 401 N. Michigan Ave. Suite 2500 Chicago, IL 60611 (800)621-6729 www.cosmedent.com

#### 19. Intraoral Repair Kit

BISCO Dental Products 1100 W. Irving Park Road Schaumburg, IL 60193 (800)247-3368 (847)534-6000 www.bisco.com

#### 20. IPS e.max

Ivoclar Vivadent, Inc. 175 Pineview Drive Amherst, NY 14228 (800)533-6825 (716)691-0010 www.ivoclarvivadent.com

#### 21. Ivoclean

Ivoclar Vivadent, Inc. 175 Pineview Drive Amherst, NY 14228 (800)533-6825 (716)691-0010 www.ivoclarvivadent.com

#### 22. KATANA Cleaner

Kuraray America, Inc. 32 Old Slip Floor 7 New York, NY 10005 (800)879-1676 www.kuraraydental.com

#### 23. Ketac Cem

Solventum 2510 Conway Avenue St. Paul, MN 55144 (855)423-6725 (612)842-1263 www.3m.com

#### 24. Maxcem Elite Chroma

Kerr Corporation 200 S. Kraemer Blvd. Bldg. E2 Brea, CA 92821 (800)537-7123 www.kerrdental.com

#### 25. MicroPrime G Desensitizer

Zest Dental Solutions 2875 Loker Avenue East Carlsbad, CA 92010 (800)262-2310 (442)244-4835 www.zestdent.com

#### 26. Monobond Etch & Prime

Ivoclar Vivadent, Inc. 175 Pineview Drive Amherst, NY 14228 (800)533-6825 (716)691-0010 www.ivoclarvivadent.com

# 27. Multilink Automix

Ivoclar Vivadent, Inc. 175 Pineview Drive Amherst, NY 14228 (800)533-6825 (716)691-0010 www.ivoclarvivadent.com

#### 28. NeoDiamonds

Microcopy P.O. Box 2017 Kennesaw, GA 30156-9017 (800)235-1863 www.microcopydental.com

#### 29. NexTemp Temporary Cement

Premier Dental Co. 1710 Romano Drive Plymouth Meeting, PA 19462 (888)670-6100 (610)239-6000 www.premierdentalco.com

#### 30. **NX3**

Kerr Corporation 200 S. Kraemer Blvd. Bldg. E2 Brea, CA 92821 (800)537-7123 www.kerrdental.com

#### 31. Panavia SA Cement Universal

Kuraray America, Inc. 32 Old Slip Floor 7 New York, NY 10005 (800)879-1676 www.kuraraydental.com

# 32. Preppies Plus

Whip Mix Corporation 361 Farmington Avenue Louisville, KY 40209 (800)626-5651 (502)637-1451 www.whipmix.com

#### 33. Prevue

Cosmedent, Inc. 401 N. Michigan Ave. Suite 2500 Chicago, IL 60611 (800)621-6729 www.cosmedent.com

### 34. RelyX Luting Plus

Solventum 2510 Conway Avenue St. Paul, MN 55144 (855)423-6725 (612)842-1263 www.3m.com

#### 35. RelyX Unicem 2

Solventum 2510 Conway Avenue St. Paul, MN 55144 (855)423-6725 (612)842-1263 www.3m.com

#### 36. RelyX Universal

Solventum 2510 Conway Avenue St. Paul, MN 55144 (855)423-6725 (612)842-1263 www.3m.com

#### 37. Telio CS Cem Implant

Ivoclar Vivadent, Inc. 175 Pineview Drive Amherst, NY 14228 (800)533-6825 (716)691-0010 www.ivoclarvivadent.com

#### 38. Temp-Bond Clear

Kerr Corporation 200 S. Kraemer Blvd. Bldg. E2 Brea, CA 92821 (800)537-7123 www.kerrdental.com

# 39. Temp-Bond NE

Kerr Corporation 200 S. Kraemer Blvd. Bldg. E2 Brea, CA 92821 (800)537-7123 www.kerrdental.com

#### 40. Temp-Bond Original

Kerr Corporation 200 S. Kraemer Blvd. Bldg. E2 Brea, CA 92821 (800)537-7123 www.kerrdental.com

#### 41. Variolink Esthetic LC

Ivoclar Vivadent, Inc. 175 Pineview Drive Amherst, NY 14228 (800)533-6825 (716)691-0010 www.ivoclarvivadent.com

#### 42. Zirconia Prime

Den-Mat Holdings, LLC 1017 W. Central Avenue Lompoc, CA 93436-2701 (800)433-6628 www.denmat.com

#### 43. **Z-Prime Plus**

BISCO Dental Products 1100 W. Irving Park Road Schaumburg, IL 60193 (800)247-3368 (847)534-6000 www.bisco.com

# Product names, the products themselves, and company names change rapidly. Please contact the companies shown to confirm current information.

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#### **PROGRAM**

# V1921 Cementing Restorations – Proven & Successful!

#### **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 historical evolution of cements and how it relates to current cements.
- 2. List and discuss currently available provisional cements.
- 3. List the final cements that are most in use today.
- 4. List the ideal characteristics for dental cements.
- 5. Discuss resin-modified glass ionomer cements and their characteristics.
- 6. Discuss resin cements and their characteristics.
- 7. List the suggested cementing procedure for zirconia restorations.
- 8. List the suggested cementing procedure for lithium disilicate cements.
- 9. Discuss cementation of ceramic veneers.
- 10. Discuss the comparative use of cements.
- 11. Discuss the importance of selecting the correct cement for specific situations.
- 12. List and discuss the suggested cements for single crowns.
- 13. List and discuss the suggested cements for short-span fixed prostheses.
- 14. List and discuss the suggested cements for full-arch splinted fixed prostheses on natural teeth.
- 15. List and discuss the suggested cements for full-arch splinted fixed prostheses on implants.
- 16. Discuss suggested staff responsibilities for cementation procedures.
- 17. State how to remove cemented restorations.
- 18. List the limitations of current cements.
- 19. List the challenges for cementation procedures.
- 20. Implement the appropriate cement suggestions into your practice.

#### OVERVIEW

# V1921 Cementing Restorations – Proven & Successful!

Dental cements continue to be improved frequently. However, there are still numerous needs to satisfy the known ideal characteristics for cements. Use of ceramic restorations has increased remarkably in recent years demanding significant changes in cement characteristics. This presentation is aimed at the present needs for cements and how to use them. Among the topics included are:

- The historical evolution of cements and how it relates to current cements
- Currently available provisional cements
- Final cements that are most in use today
- Ideal characteristics for dental cements
- Resin-modified glass ionomer cements and their characteristics
- Resin cements and their characteristics
- Suggested cementing procedure for zirconia restorations
- Suggested cementing procedure for lithium disilicate cements
- Cementation of ceramic veneers
- Comparative use of cements
- Importance of selecting the correct cement for specific situations
- Suggested cements for single crowns
- Suggested cements for short-span fixed prostheses
- Suggested cements for full-arch splinted fixed prostheses on natural teeth
- Suggested cements for full-arch splinted fixed prostheses on implants
- Suggested staff responsibilities for cementation procedures
- How to remove cemented restorations
- Limitations of current cements
- Challenges for cementation procedures
- Implementing the appropriate cement suggestions into your practice

# **SUPPLEMENTAL MATERIALS**

# V1921 Cementing Restorations – Proven & Successful!

- 1. Christensen GJ. Ask Dr. Christensen: Why are some zirconia crowns failing? Dental Economics. 2019 Dec;109(12):69-71, 73.
- 2. Tjäderhane L, Tezvergil-Mutluay A. Performance of Adhesives and Restorative Materials After Selective Removal of Carious Lesions: Restorative Materials with Anticaries Properties. Dent Clin North Am. 2019 Oct;63(4):715-29.
- 3. Christensen GJ. Ask Dr. Christensen: Which crown goes where? Dental Economics. 2019 Sep;109(9):62-6.
- 4. Nagarkar S, Theis-Mahon N, Perdigão J. Universal dental adhesives: Current status, laboratory testing, and clinical performance. J Biomed Mater Res B Appl Biomater. 2019 Aug;107(6):2121-2131.
- 5. Lawson NC, Litaker MS, Ferracane JL, Gordan VV, Atlas AM, Rios T, Gilbert GH, McCracken MS, National Dental Practice-Based Research Network Collaborative Group. Choice of cement for single-unit crowns: Findings from The National Dental Practice-Based Research Network. J Am Dent Assoc. 2019 Jun;150(6):522-30.
- 6. Christensen GJ. Ask Dr. Christensen: How do I request the best kind of zirconia crown? Dental Economics. 2019 Jun;109(6):80-82, 102.
- 7. Christensen GJ. Ask Dr. Christensen: Making optimal zirconia crowns. Dental Economics. 2019 May;109(5):75-8.
- 8. Khan AS, Syed MR. A review of bioceramics-based dental restorative materials. Dent Mater J. 2019 Mar 31;38(2):163-76.
- 9. Christensen GJ. Ask Dr. Christensen: What type of crown should I use? Dental Economics. 2019 Feb;109(2):68-72.
- 10. Christensen GJ. Ask Dr. Christensen: Do we really bond to tooth preparations? Dental Economics. 2018 Dec;108(12):58-61.
- 11. Turkistani A, Islam S, Shimada Y, Tagami J, Sadr A. Dental cements: Bioactivity, bond strength and demineralization progression around restorations. Am J Dent. 2018 Nov 15;31(Sp Is B):24B-31B.
- 12. Christensen GJ. Ask Dr. Christensen: What is the best type of material for posterior crowns? Dental Economics. 2018 Oct;108(10):79-81.
- 13. Christensen GJ. Ask Dr. Christensen: What material should I use for an anterior three-unit fixed prosthesis? Dental Economics. 2018 Feb;108(2):56-9.
- 14. Christensen GJ. Ask Dr. Christensen: Crown, onlay, or direct restoration? Dental Economics. 2017 Apr;107(4):80-2.

# **POST-TEST**

# V1921 Cementing Restorations – Proven & Successful!

- 1. The most-used cement currently is:
  - a. glass ionomer.
  - b. resin-modified glass ionomer.
  - c. adhesive resin.
  - d. self-adhesive resin.
- 2. A significant lack in some cements currently is:
  - a. strength.
  - b. solubility.
  - c. cariostatic activity.
  - d. none of the above.
- 3. Which of the following is true relative to resin-modified glass ionomers?
  - a. They have more strength than resin.
  - b. They have less strength than resin.
  - c. They have equal strength to resin.
  - d. Strength is not an important cement characteristic.
- 4. Adhesive resin cements:
  - a. do not require a separate primer.
  - b. require a separate primer.
  - c. bond well to tooth structure over the long term.
  - d. are the most-used resin category.
- 5. Resin cements:
  - a. are soluble in mouth fluids.
  - b. are radiolucent.
  - c. are not cariostatic.
  - d. currently are used most.
- 6. MDP primer:
  - a. is a bonding agent for lithium disilicate.
  - b. is a bonding agent for zirconia.
  - c. is a bonding agent for both a and b above.
  - d. produces a strong bond.
- 7. Sandblasting zirconia:
  - a. significantly increases the retention to resin cement.
  - b. can slightly increase resin retention to zirconia.
  - c. is not suggested for Class 5 zirconia.
  - d. should NOT be accomplished on any form of zirconia.

# POST-TEST (CONT'D)

# V1921 Cementing Restorations – Proven & Successful!

- 8. Cementing ceramic veneers on preps with all dentin surfaces:
  - a. produces a strong long-lasting bond.
  - b. is not suggested as a viable concept.
  - c. does not require mechanical retention.
  - d. none of the above.
- 9. This presentation suggested which cement for zirconia?
  - a. Adhesive resin
  - b. Self-adhesive resin
  - c. Resin-modified glass ionomer
  - d. Glass ionomer
- 10. This presentation suggested which cement for lithium disilicate?
  - a. Adhesive resin
  - b. Self-adhesive resin
  - c. Resin-modified glass ionomer
  - d. Any of the above depending on the clinical situation and thickness of the material

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