

**PRACTICAL CLINICAL COURSES**  
A Service of the Gordon J. Christensen  
Career Development Program

**V1572**  
**Onlays vs. Crowns**

Gordon J. Christensen, DDS, MSD, PhD

**Materials Included:**

C.E. Instruction Sheet  
Products List  
Clinician Responsible  
Goals & Objectives  
Overview  
Supplemental Materials  
AGD Post-Test

**Gordon J. Christensen**  
**PRACTICAL CLINICAL COURSES**

**PROCEDURE FOR RECEIVING  
CE CREDIT FOR VIDEO COURSES**

1. Complete the enclosed Post-Test.\* For each **CE Video Purchased**, one test is included. If additional tests are needed, the following fees will apply: \$25 per test for 1 additional dentist; \$10 per test for each auxiliary (dental assistants, hygienists, lab technicians - no limit on auxiliary tests). Fees can be paid either by check or credit card when tests are submitted to Practical Clinical Courses.
2. Complete the demographic information located at the end of the test.  
**Type of Credit:**
  - a. If the applicant selects "State," PCC will issue a certificate of verification to the applicant. The applicant must then submit this certificate to their state board to obtain credit.
  - b. If the applicant selects "AGD," PCC will submit credit information to the Academy of General Dentistry and confirmation to the applicant that it has been submitted (the applicant may check their AGD transcript for verification – please allow 30 days).
  - c. If the applicant selects "Both," PCC will complete a. & b. above.
3. Return the **Post-Test portion** via mail, fax, or email. Our contact information is as follows:

**Practical Clinical Courses**  
**3707 N Canyon Road**  
**Suite 3D**  
**Provo, UT 84604**  
**Fax: (801) 226-8637**  
[info@pccdental.com](mailto:info@pccdental.com)

4. Practical Clinical Courses will correct the Post-Test. **Passing scores are 70% or higher.**

***\*TO OBTAIN CE CREDIT ONLINE:*** Login or create an account on [www.pccdental.com](http://www.pccdental.com) and select "My CE Tests" from the left-side menu. Click on the video title to take the test online. **RESULTS ARE IMMEDIATE.** Missing the test? Contact us at 800-223-6569 during our business hours of 7:00 a.m. – 4:00 p.m. MST to add it to your account.

Gordon J. Christensen  
**PRACTICAL CLINICAL COURSES**  
*Sources of Products Discussed in*  
**V1572 Onlays vs. Crowns**

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

1. **AccuFilm II**  
Parkell, Inc.  
300 Executive Drive  
Edgewood, NY 11717  
(800)243-7446  
(631)249-1134  
[www.parkell.com](http://www.parkell.com)
2. **Adhesive Universal**  
Ivoclar Vivadent  
175 Pineview Drive  
Amherst, NY 14228  
(800)533-6825  
(716)691-0010  
[www.ivoclarvivadent.us.com](http://www.ivoclarvivadent.us.com)
3. **Aquasil Ultra**  
Dentsply Caulk  
38 West Clarke Avenue  
Milford, DE 19968  
(800)532-2855  
(302)422-4511  
[www.dentsply.com](http://www.dentsply.com)
4. **Bisco Intraoral Repair Kit**  
Bisco, Inc.  
1100 West Irving Park Road  
Schaumburg, IL 60193  
(800)247-3368  
(847)534-6000  
[www.bisco.com](http://www.bisco.com)
5. **Blu-Mousse**  
Parkell, Inc.  
300 Executive Drive  
Edgewood, NY 11717  
(800)243-7446  
(631)249-1134  
[www.parkell.com](http://www.parkell.com)
6. **Boxing Wax – Red**  
Various Manufacturers
7. **BruxZir Esthetic**  
Various Distributors  
[www.bruxyzir.com](http://www.bruxyzir.com)
8. **CEREC Omnicam**  
Sirona Dental, Inc.  
4835 Sirona Drive  
Suite 100  
Charlotte, NC 28273  
(800)659-5977  
(704)587-0453  
[www.sirona.com](http://www.sirona.com)
9. **CEREC System**  
Sirona Dental, Inc.  
4835 Sirona Drive  
Suite 100  
Charlotte, NC 28273  
(800)659-5977  
(704)587-0453  
[www.sirona.com](http://www.sirona.com)
10. **Clearfil Universal Bond**  
Kuraray America, Inc.  
Dental Department  
33 Maiden Lane, Suite 600D  
New York, NY 10038  
(800)879-1676  
(212)986-2230  
[www.kuraraydental.com](http://www.kuraraydental.com)
11. **Crosstech Diamond**  
Dentalree  
10015 Sky Parlor Road  
Las Vegas, NV 89178  
(800)996-0686  
[www.dentalree.com](http://www.dentalree.com)
12. **Dentapops**  
Primotec  
5616 Campanile Way  
San Diego, CA 92115  
(916)849-2637  
[www.dentapops.com](http://www.dentapops.com)
13. **Directed Flow Impression Tray**  
3M ESPE Dental Products  
2510 Conway Avenue  
St. Paul, MN 55144  
(800)634-2249  
(651)575-5144  
[www.3mespe.com](http://www.3mespe.com)
14. **Dry Tips**  
Mölnlycke Health Care  
5550 Peachtree Parkway  
Suite 500  
Norcross, GA 30092  
(800)843-8497  
(470)375-0000  
[www.molnlycke.us](http://www.molnlycke.us)
15. **Dyract eXtra Universal**  
Dentsply Caulk  
38 West Clarke Avenue  
Milford, DE 19968  
(800)532-2855  
(302)422-4511  
[www.dentsply.com](http://www.dentsply.com)
16. **Examix NDS**  
GC America  
3737 West 127<sup>th</sup> Street  
Alsip, IL 60803  
(800)323-7063  
(708)597-0900  
[www.gcamerica.com](http://www.gcamerica.com)

17. **G5**  
Clinician's Choice Dental  
Products  
P.O. Box 1706  
New Milford, CT 06776  
(800)265-3444  
[www.clinicianschoice.com](http://www.clinicianschoice.com)
18. **G-CEM LinkAce**  
GC America  
3737 West 127<sup>th</sup> Street  
Alsip, IL 60803  
(800)323-7063  
(708)597-0900  
[www.gcamerica.com](http://www.gcamerica.com)
19. **GC Fuji Lining LC**  
GC America  
3737 West 127<sup>th</sup> Street  
Alsip, IL 60803  
(800)323-7063  
(708)597-0900  
[www.gcamerica.com](http://www.gcamerica.com)
20. **Gingi-Pak**  
Gingi-Pak  
4825 Calle Alto  
Camarillo, CA 93011  
(800)437-1514  
(805)484-1051  
[www.gingi-pak.com](http://www.gingi-pak.com)
21. **Gluma Desensitizer Liquid**  
Heraeus Kulzer  
300 Heraeus Way  
South Bend, IN 46614  
(800)431-1785  
[www.heraeus-dental-us.com](http://www.heraeus-dental-us.com)
22. **Gluma Desensitizer PowerGel**  
Heraeus Kulzer  
300 Heraeus Way  
South Bend, IN 46614  
(800)431-1785  
[www.heraeus-dental-us.com](http://www.heraeus-dental-us.com)
23. **Glu/Sense**  
Centrix  
770 River Road  
Shelton, CT 06484  
(800)235-5862  
(203)929-5582  
[www.centrixdental.com](http://www.centrixdental.com)
24. **Imprint 4**  
3M ESPE Dental Products  
2510 Conway Avenue  
St. Paul, MN 55144  
(800)634-2249  
(651)575-5144  
[www.3mespe.com](http://www.3mespe.com)
25. **IPS e.max**  
Ivoclar Vivadent  
175 Pineview Drive  
Amherst, NY 14228  
(800)533-6825  
(716)691-0010  
[www.ivoclarvivadent.us.com](http://www.ivoclarvivadent.us.com)
26. **IPS Empress**  
Ivoclar Vivadent  
175 Pineview Drive  
Amherst, NY 14228  
(800)533-6825  
(716)691-0010  
[www.ivoclarvivadent.us.com](http://www.ivoclarvivadent.us.com)
27. **Ivoclean Cleaning Paste**  
Ivoclar Vivadent  
175 Pineview Drive  
Amherst, NY 14228  
(800)533-6825  
(716)691-0010  
[www.ivoclarvivadent.us.com](http://www.ivoclarvivadent.us.com)
28. **Lava Ultimate**  
3M ESPE Dental Products  
2510 Conway Avenue  
St. Paul, MN 55144  
(800)634-2249  
(651)575-5144  
[www.3mespe.com](http://www.3mespe.com)
29. **Madame Butterfly**  
Almore International  
P.O. Box 25214  
Portland, OR 97298-0214  
(800)547-1511  
(503)643-6633  
[www.almore.com](http://www.almore.com)
30. **Maxcem Elite**  
Kerr Corporation  
1717 West Collins Avenue  
Orange, CA 92867  
(800)537-7123  
(714)516-7400  
[www.kerrdental.com](http://www.kerrdental.com)
31. **Micro-Fill Composite Finishing Kit**  
E.C. Moore Company  
13325 Leonard Street  
Dearborn, MI 48126  
(800)331-3548  
(313)581-7878  
[www.ecmoore.com](http://www.ecmoore.com)
32. **MicroEtcher**  
Danville Materials  
3420 Fostoria Way  
Suite A-200  
San Ramon, CA 94583  
(800)827-7940  
(925)973-0710  
[www.danvillematerials.com](http://www.danvillematerials.com)
33. **MicroPrime G**  
Danville Materials  
3420 Fostoria Way  
Suite A-200  
San Ramon, CA 94583  
(800)827-7940  
(925)973-0710  
[www.danvillematerials.com](http://www.danvillematerials.com)

34. **Monobond Plus**  
Ivoclar Vivadent  
175 Pineview Drive  
Amherst, NY 14228  
(800)533-6825  
(716)691-0010  
[www.ivoclarvivadent.us.com](http://www.ivoclarvivadent.us.com)
35. **MultiCore Flow Automix**  
Ivoclar Vivadent  
175 Pineview Drive  
Amherst, NY 14228  
(800)533-6825  
(716)691-0010  
[www.ivoclarvivadent.us.com](http://www.ivoclarvivadent.us.com)
36. **Multilink Automix**  
Ivoclar Vivadent  
175 Pineview Drive  
Amherst, NY 14228  
(800)533-6825  
(716)691-0010  
[www.ivoclarvivadent.us.com](http://www.ivoclarvivadent.us.com)
37. **NeoDiamond**  
Microcopy  
3120 Moon Station Road NW  
Kennesaw, GA 30144  
(800)235-1863  
(770)425-5715  
[www.microcopydental.com](http://www.microcopydental.com)
38. **Occlusal Indicator Wax**  
Kerr Corporation  
1717 West Collins Avenue  
Orange, CA 92867  
(800)537-7123  
(714)516-7400  
[www.kerrdental.com](http://www.kerrdental.com)
39. **OptraGate**  
Ivoclar Vivadent  
175 Pineview Drive  
Amherst, NY 14228  
(800)533-6825  
(716)691-0010  
[www.ivoclarvivadent.us.com](http://www.ivoclarvivadent.us.com)
40. **Panavia SA Cement Plus**  
Kuraray America, Inc.  
Dental Department  
33 Maiden Lane, Suite 600D  
New York, NY 10038  
(800)879-1676  
(212)986-2230  
[www.kuraraydental.com](http://www.kuraraydental.com)
41. **Planmeca FIT**  
Henry Schein, Inc.  
135 Duryea Road  
Melville, NY 11747  
(800)582-2702  
(631)843-5500  
[www.henryschein.com](http://www.henryschein.com)
42. **Preppies Plus**  
Whip Mix Corporation  
361 Farmington Avenue  
P.O. Box 17183  
Louisville, KY 40217  
(800)626-5651  
(502)637-1451  
[www.whipmix.com](http://www.whipmix.com)
43. **Prime&Bond Elect**  
Dentsply Caulk  
38 West Clarke Avenue  
Milford, DE 19968  
(800)532-2855  
(302)422-4511  
[www.dentsply.com](http://www.dentsply.com)
44. **Quad-Tray Xtreme**  
Clinician's Choice Dental  
Products  
P.O. Box 1706  
New Milford, CT 06776  
(800)265-3444  
[www.clinicianschoice.com](http://www.clinicianschoice.com)
45. **RelyX Ultimate**  
3M ESPE Dental Products  
2510 Conway Avenue  
St. Paul, MN 55144  
(800)634-2249  
(651)575-5144  
[www.3mespe.com](http://www.3mespe.com)
46. **RelyX Unicem 2**  
3M ESPE Dental Products  
2510 Conway Avenue  
St. Paul, MN 55144  
(800)634-2249  
(651)575-5144  
[www.3mespe.com](http://www.3mespe.com)
47. **Retraction Capsule**  
3M ESPE Dental Products  
2510 Conway Avenue  
St. Paul, MN 55144  
(800)634-2249  
(651)575-5144  
[www.3mespe.com](http://www.3mespe.com)
48. **ROEKO Stay-Put**  
Coltene/Whaledent Inc.  
235 Ascot Parkway  
Cuyahoga Falls, OH 44223  
(800)221-3046  
(330)916-8800  
[www.coltene.com](http://www.coltene.com)
49. **Scotchbond Universal Adhesive**  
3M ESPE Dental Products  
2510 Conway Avenue  
St. Paul, MN 55144  
(800)634-2249  
(651)575-5144  
[www.3mespe.com](http://www.3mespe.com)
50. **Scotchbond Universal Etchant**  
3M ESPE Dental Products  
2510 Conway Avenue  
St. Paul, MN 55144  
(800)634-2249  
(651)575-5144  
[www.3mespe.com](http://www.3mespe.com)

51. **Sideless Triple Tray**  
Premier Dental Products  
1710 Romano Drive  
Plymouth Meeting, PA 19462  
(888)670-6100  
(610)239-6000  
[www.premusa.com](http://www.premusa.com)
52. **Solo Diamond**  
Premier Dental Products  
1710 Romano Drive  
Plymouth Meeting, PA 19462  
(888)670-6100  
(610)239-6000  
[www.premusa.com](http://www.premusa.com)
53. **Spring Health Diamond**  
Spring Health Products  
705 General Washington Avenue  
Norristown, PA 19403  
(800)800-1680  
(610)630-9171  
[www.springhealthproducts.com](http://www.springhealthproducts.com)
54. **Telio CS Desensitizer**  
Ivoclar Vivadent  
175 Pineview Drive  
Amherst, NY 14228  
(800)533-6825  
(716)691-0010  
[www.ivoclarvivadent.us.com](http://www.ivoclarvivadent.us.com)
55. **Telio CS Inlay**  
Ivoclar Vivadent  
175 Pineview Drive  
Amherst, NY 14228  
(800)533-6825  
(716)691-0010  
[www.ivoclarvivadent.us.com](http://www.ivoclarvivadent.us.com)
56. **TempBond – NE, Clear, Original**  
Kerr Corporation  
1717 West Collins Avenue  
Orange, CA 92867  
(800)537-7123  
(714)516-7400  
[www.kerrdental.com](http://www.kerrdental.com)
57. **TheraCal LC**  
Bisco, Inc.  
1100 West Irving Park Road  
Schaumburg, IL 60193  
(800)247-3368  
(847)534-6000  
[www.bisco.com](http://www.bisco.com)
58. **Triad TruTray**  
Dentsply Prosthetics  
570 West College Avenue  
York, PA 17405  
(800)243-1942  
(717)849-4502  
[www.dentsply.com](http://www.dentsply.com)
59. **TrollFoil**  
TrollDental  
661 Hayward Avenue North  
Oakdale, MN 55128  
(800)537-8765  
(203)775-4342  
[www.trolldental.com](http://www.trolldental.com)
60. **Ultra-Etch**  
Ultradent Products, Inc.  
505 West 10200 South  
South Jordan, UT 84095  
(888)230-1420  
(801)572-4200  
[www.ultradent.com](http://www.ultradent.com)
61. **VALO**  
Ultradent Products, Inc.  
505 West 10200 South  
South Jordan, UT 84095  
(888)230-1420  
(801)572-4200  
[www.ultradent.com](http://www.ultradent.com)
62. **ViscoStat Clear**  
Ultradent Products, Inc.  
505 West 10200 South  
South Jordan, UT 84095  
(888)230-1420  
(801)572-4200  
[www.ultradent.com](http://www.ultradent.com)
63. **Vitrebond Plus**  
3M ESPE Dental Products  
2510 Conway Avenue  
St. Paul, MN 55144  
(800)634-2249  
(651)575-5144  
[www.3mespe.com](http://www.3mespe.com)
64. **Z-Prime Plus**  
Bisco, Inc.  
1100 West Irving Park Road  
Schaumburg, IL 60193  
(800)247-3368  
(847)534-6000  
[www.bisco.com](http://www.bisco.com)

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

Gordon J. Christensen Practical Clinical Courses, 3707 North Canyon Road, Suite 3D, Provo, UT 84604  
Toll Free (800) 223-6569 or Utah Residents (801) 226-6569

The techniques and procedures on this videotape are intended to be suggestions only. Any licensed practitioner viewing this presentation must make his or her own professional decisions about specific treatment for patients. PCC is not responsible for any damages or other liabilities (including attorney's fees) resulting, or claimed to result in whole or in part, from actual or alleged problems arising out of the use of this presentation.

## **PROGRAM**

### **V1572 Onlays vs. Crowns**

## **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. Describe the characteristics of tooth preparations for inlays, onlays, and crowns.
2. Describe why crowns are done more than onlays.
3. Discuss the differences between laboratory made and in-office milled onlays.
4. Draw the tooth preparation for an onlay on a mandibular molar.
5. Discuss liners and bases for inlays and onlays.
6. Discuss soft-tissue management for inlays and onlays.
7. Describe the suggested impression technique for one onlay.
8. Discuss provisional materials for inlays and onlays.
9. Describe the technique for making provisional restorations for onlays.
10. List the types of cements for provisional restorations.
11. Describe why some provisional materials do not require cement.
12. Compare strength of onlays with the strength of uncut teeth.
13. Discuss materials for inlays and onlays.
14. Compare materials for inlays and onlays.
15. Describe zirconia.
16. Describe lithium disilicate.
17. Describe resin nano ceramic.
18. Compare cements for inlays and onlays.
19. List the technique steps for prepping an onlay.
20. List the technique steps for seating an onlay.

## OVERVIEW

### **V1572 Onlays vs. Crowns**

This presentation demonstrates the steps in diagnosis and treatment for tooth-colored inlays and onlays using zirconia, lithium disilicate, and resin nano ceramic. The following topics are included:

- Typical teeth needing major restoration
- What are the characteristics of inlays, onlays, and crowns?
- Why crowns are more commonly placed than onlays
- Laboratory made onlays
- In-office milled onlays
- Tooth preparations
- Liners and bases
- Soft-tissue management
- Impressions, conventional and scanned
- Provisional restoration materials
- Cements for provisional restorations
- Seating provisional restorations
- Materials for onlays
- Strength of onlays
- Demonstration of three onlay types
- Cements for onlays
- Cementing lithium disilicate onlays/inlays
- Cementing zirconia onlays/inlays
- Cementing resin nano ceramic inlays/onlays
- Acid etching enamel
- Tooth preparation disinfection and desensitization
- Bonding agents for onlays/inlays
- Seating onlays
- Occlusal considerations
- Long-term maintenance and repair
- Additional educational information
- Conclusions



## **SUPPLEMENTAL MATERIALS**

### **V1572 Onlays vs. Crowns**

1. Mynampati P, Babu MR, Saraswathi DD, Kumar JR, Gudugunta L, Gaddam D. Comparison of fracture resistance and failure pattern of endodontically treated premolars with different esthetic onlay systems: An in vitro study. *J Conserv Dent*. 2015 Mar-Apr;18(2):140-3. doi: 10.4103/0972-0707.153072.
2. Chen C, Trindade FZ, de Jager N, Kleverlaan CJ, Feilzer AJ. The fracture resistance of a CAD/CAM Resin Nano Ceramic (RNC) and a CAD ceramic at different thicknesses. *Dent Mater*. 2014 Sep;30(9):954-62. doi: 10.1016/j.dental.2014.05.018. Epub 2014 Jul 15.
3. Oilo M, Hardang AD, Ulsund AH, Gjerdet NR. Fractographic features of glass-ceramic and zirconia-based dental restorations fractured during clinical function. *Eur J Oral Sci*. 2014 Jun;122(3):238-44. doi: 10.1111/eos.12127. Epub 2014 Apr 4.
4. Belli R, Geinzer E, Muschweck A, Petschelt A, Lohbauer U. Mechanical fatigue degradation of ceramics versus resin composites for dental restorations. *Dent Mater*. 2014 Apr;30(4):424-32. doi: 10.1016/j.dental.2014.01.003. Epub 2014 Feb 17.
5. Fabbri G, Zarone F, Dellificorelli G, Cannistraro G, De Lorenzi M, Mosca A, Sorrentino R. Clinical evaluation of 860 anterior and posterior lithium disilicate restorations: retrospective study with a mean follow-up of 3 years and a maximum observational period of 6 years. *Int J Periodontics Restorative Dent*. 2014 Mar-Apr;34(2):165-77. doi: 10.11607/prd.1769.
6. Joda T, Huber S, Bürki A, Zysset P, Brägger U. Influence of Abutment Design on Stiffness, Strength, and Failure of Implant-Supported Monolithic Resin Nano Ceramic (RNC) Crowns. *Clin Implant Dent Relat Res*. 2014 Mar 14. doi: 10.1111/cid.12215. [Epub ahead of print].
7. Yu W, Guo K, Zhang B, Weng W. Fracture resistance of endodontically treated premolars restored with lithium disilicate CAD/CAM crowns or onlays and luted with two luting agents. *Dent Mater J*. 2014;33(3):349-54. Epub 2014 Apr 17.
8. Saridag S, Sevimay M, Pekkan G. Fracture resistance of teeth restored with all-ceramic inlays and onlays: an in vitro study. *Oper Dent*. 2013 Nov-Dec;38(6):626-34. doi: 10.2341/12-211-L. Epub 2013 Feb 7.
9. Ma L, Guess PC, Zhang Y. Load-bearing properties of minimal-invasive monolithic lithium disilicate and zirconia occlusal onlays: finite element and theoretical analyses. *Dent Mater*. 2013 Jul;29(7):742-51. doi: 10.1016/j.dental.2013.04.004. Epub 2013 May 15.
10. Fabianelli A, Goracci C, Bertelli E, Davidson CL, Ferrari M. A clinical trial of Empress II porcelain inlays luted to vital teeth with a dual-curing adhesive system and a self-curing resin cement. *J Adhes Dent*. 2006 Dec;8(6):427-31.

## **SUPPLEMENTAL MATERIALS (CONT'D)**

### **V1572 Onlays vs. Crowns**

11. Thordrup M, Isidor F, Hörsted-Bindslev P. A prospective clinical study of indirect and direct composite and ceramic inlays: ten-year results. *Quintessence Int.* 2006 Feb;37(2):139-44.
12. Krämer N, Frankenberger R. Clinical performance of bonded leucite-reinforced glass ceramic inlays and onlays after eight years. *Dent Mater.* 2005 Mar;21(3):262-71.
13. Hayashi M, Wilson NH, Yeung CA, Worthington HV. Systematic review of ceramic inlays. *Clin Oral Investig.* 2003 Mar;7(1):8-19. Epub 2002 Dec 21.
14. Thordrup M, Isidor F, Hörsted-Bindslev P. A 5-year clinical study of indirect and direct resin composite and ceramic inlays. *Quintessence Int.* 2001 Mar;32(3):199-205.
15. Heymann HO, Bayne SC, Sturdevant JR, Wilder Jr AD, Roberson TM. The clinical performance of CAD-CAM-generated ceramic inlays: a four-year study. *J Am Dent Assoc.* 1996 Aug;127(8):1171-81.

## POST-TEST

### **V1572 Onlays vs. Crowns**

1. An onlay is described by third-party payment organizations as a restoration that:
  - a. covers all tooth cusps.
  - b. covers at least one cusp.
  - c. covers at least the chewing (pestle) cusp.
  - d. is any indirectly made partial coverage restoration.
  
2. Which is strongest?
  - a. Bonded inlay
  - b. Onlay covering at least half of the cusps
  - c. Onlay covering all of the cusps
  - d. Bonded resin-based composite
  
3. Tooth preparations for onlays should have:
  - a. at least 1.5 mm of reduction on the occlusal surfaces.
  - b. more divergence than cast gold alloy restorations.
  - c. no gingival bevels.
  - d. all of the above.
  
4. Impressions for one onlay are best made in:
  - a. a double-arch tray.
  - b. the centric relation position.
  - c. a full-arch tray.
  - d. light curing vinyl polysiloxane.
  
5. Provisional restorations for onlays:
  - a. should always be made in bis-acryl.
  - b. should always be cemented.
  - c. can be made in bis-acryl, if retention of the prep is low.
  - d. always have good retention.
  
6. Which was the strongest material (numerically) in the CR study reported in the video?
  - a. Resin nano ceramic
  - b. Zirconia
  - c. Uncut tooth
  - d. Lithium disilicate
  
7. The most adequate cement for onlays is usually:
  - a. resin-modified glass ionomer.
  - b. glass ionomer.
  - c. resin.
  - d. bonded resin-modified glass ionomer.

**POST-TEST (CONT'D)**

**V1572 Onlays vs. Crowns**

- 8. Soft-tissue management for inlays and onlays:
  - a. uses ferric sulfate styptic.
  - b. is minimal.
  - c. requires cord placement.
  - d. requires aluminum chloride styptic.
  
- 9. Lithium disilicate restorations should be cleaned before cementation with:
  - a. sandblasting.
  - b. hydrofluoric acid etch for at least 10 seconds.
  - c. hydrochloric acid.
  - d. Ivoclean or phosphoric acid.
  
- 10. Zirconia should be cleaned before cementation with:
  - a. phosphoric acid.
  - b. hydrofluoric acid.
  - c. Ivoclean or sandblast.
  - d. hydrochloric acid.

**PLEASE PRINT**

Name \_\_\_\_\_

Name of video purchaser (if different from above) \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone No. \_\_\_\_\_

Email \_\_\_\_\_

Indicate which type of credit you wish to obtain:  AGD  State  Both

State License No. \_\_\_\_\_ AGD No. \_\_\_\_\_

Payment information  Visa  American Express  Mastercard  Discover

Card # \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Expires \_\_\_\_/\_\_\_\_ CVV2-Code: \_\_\_\_\_

The test is complimentary for the purchaser. *If you require CE tests for staff members or an additional doctor to receive credit, the fees are:*

**Dentist** (limit 1 additional dentist per video purchase): \$25

**Auxiliary** (no limit): \$10 for each auxiliary taking test