

# **PRACTICAL CLINICAL COURSES**

A Service of the Gordon J. Christensen  
Career Development Program

**V1332**

## **Nonsurgical Removal of: Gutta Percha, Silver Points, Carriers & Paste Fillers**

Produced by

**ADVANCED ENDODONTICS**

Clifford J. Ruddle, DDS (Founder/Director)

### **Materials Included**

C.E. Instruction Sheet  
Product/Supplier Lists  
Clinician Responsible  
Goals & Objectives  
Overview  
References  
AGD Post-Test

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

**PROCEDURE FOR RECEIVING**  
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**AND STATE CREDIT**  
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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.  
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  - a. If the applicant selects "State," PCC will send a certificate of verification to the applicant. The applicant must then submit this certificate to his/her 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. – 5:00 p.m. MST to add it to your account.

Clifford J. Ruddle  
**ADVANCED ENDODONTICS**  
*Sources of Products Discussed in*  
**V1332 Nonsurgical Removal of:**  
**Gutta Percha, Silver Points, Carriers & Paste Fillers**  
 Presented by: Clifford J. Ruddle, DDS

ITEM	DESCRIPTION	BRAND / COMPANY
Edge-Ease	X-ray Comfort Cushions	Strong Dental / Schein
Rubber Dam	Handidam (one size)	Aseptico / Dentsply Tulsa Dental
Rubber Dam Frame	Ostby Type - Part no. 547-3539	Hygenic / Schein
Rubber Dam Clamps	Molars (26, 8A), Anteriors (9), Bi's (9)	Ivory or Hu-Friedy / Schein
Hot Pulp Test Tip	For thermal testing	SybronEndo or Schein
Mirror Handle w/Ruler	Item #100-8125	Schein
Stropko Irrigator	Tri-plex syringe adapter	Dr. John Stropko
Metalift	Crown & Bridge Remover	Classic Practice Resources
Endo Access Kit	Assorted Burs & X-Gates	Dentsply Tulsa Dental
Burs...Transmetal	1958 or 2158 FG	Brasseler
...Round Surgical Length	FG 2, 4 Carbide	Brasseler
...Tapered Diamonds	Round End (6856L-014) / Needle (859-010)	Brasseler
<b>IRRIGANTS / DEVICES:</b>		
Irrigating Syringes	3cc, 23 gauge (notched tip)	Monoject / Schein
Navi-Tip	29 gauge (notched tip), 21 mm	Ultradent
NaOCl Warmer	Sm. hotplate for warm water bath	Mr. Coffee
Water Beaker	2651A (3x3) -- For NaOCl syringes	Profex Medical Products
RC Prep or Glyde	Viscous chelator	Schein
Syringe for RC Prep / Glyde	1cc Plastic #0124	Ultradent
Tip for syringe / Stropko Irrigator	White Mac #0661	Ultradent
17% EDTA	Aqueous chelator	Roth International
Calcium Hydroxide	Interappointment dressing	Pulpdent / Schein
Xylo/Chloroform	Clean excess sealer off walls / Remove cements	Schein
<b>HAND INSTRUMENTATION:</b>		
Files / 10, 15	K-Files	Dentsply Maillefer
Files / 20, 25, 30	Flexofiles	Dentsply Maillefer
Files / 35, 40, 50, 60	SureFlex	Dentsply Maillefer
ProTaper Hand Files	Snap-on handles (SX, S1, S2, F1, F2, F3)	Dentsply Tulsa Dental
Bird Beak Plier	For precurving NiTi hand files	Hu-Friedy / Schein
Endo Ring	Blue Ring w/Foam Inserts	Jordco / Schein
Micro Openers & Debridors	All Sizes	Dentsply Maillefer
<b>ROTARY INSTRUMENTATION:</b>		
ProTaper Rotary Files	SX, S1, S2, F1, F2, F3, F4, F5	Dentsply Tulsa Dental
ProTaper Retreatment Files	D1, D2, D3	Dentsply Tulsa Dental
ProFile Orifice Shapers	Sizes 20-50	Dentsply Tulsa Dental
ProFile .04 Tapers	Sizes 35-50	Dentsply Tulsa Dental
X-Gates	Single Instrument (Gates Gliddens 1-4)	Dentsply Tulsa Dental
Gates Glidden Drills	Stainless Steel Sizes 1-6	Dentsply Maillefer

(Continued)

ITEM	DESCRIPTION	BRAND / COMPANY
<b>CROWN &amp; BRIDGE REMOVAL:</b>		
Crown Splitter	Removing restorative segments	SybronEndo
K.Y. Pliers	Grasping Instrument	G.C. America / Schein
Wynman Crown Gripper	Grasping Instrument	Miltex Instrument / Schein
Crown-a-matic	Percussive Instrument	Peerless / Schein
Coronaflex	Percussive Instrument	KaVo America
Metalift	Passive/Active Instrument	Classic Practice Resources
Kline Crown Remover	Passive/Active Instrument	Brasseler
Richwil	Accessory Device	Almore / Schein
Rand	Accessory Device	J.R.Rand / Schein
<b>CANAL OBSTRUCTIONS:</b>		
Stieglitz Forceps	Silver point removers	Hu-Friedy / Schein
Spinal Tap Needle	18, 20, 22 g., 2 1/2", SS-1529 Blunt	Ranfac
Instrument Removal System (iRS)	Remove silver points, carriers or files	Dentsply Tulsa Dental
Ruddle Post Removal System	Post Remover Kit	SybronEndo
Roto-Pro Burs (Variety of sizes)	Rotosonic Scalers for Post Removal	Ellman
Gyro-Tip	For Fiber Post Removal	Ultradent
<b>PASTE REMOVAL:</b>		
Endosolv E	Eugenate Based Paste	Endoco
Endosolv R	Resin Based Paste	Endoco
<b>PERFORATION REPAIRS:</b>		
ProRoot (MTA)	Mineral Trioxide Aggregate	Dentsply Tulsa Dental
SuperEba	Resin cement	Harry J. Bosworth / Schein
Calcium Sulfate	Medical Grade	Life Core Biomedical
CollaCote	Absorbable collagen dressing	Sulzer Dental
West Perf Repair Instruments	West 1-2, West 3-4	SybronEndo
Spinal Tap Needle	18 g. for delivering ProRoot	Ranfac
Dovgan Carriers	ProRoot (MTA) Carrier	Quality Aspirators
<b>ADHESION DENTISTRY:</b>		
Curing Light	Demetron or Pro-Lite	SybronEndo or Maillefer
Focu Tips	For narrowing light beam	SmartPractice
Tubulicid Red	For cleaning enamel & dentin	Global Dental
Etch-37	Etchant 37% Phosphoric Acid	Bisco
Tooth Conditioner Gel	Etching gel in syringe	Caulk / Schein
Microbrush	Etching & bonding	Schein
Benda Brush	Applicator brush	Centrix / Schein
<b>OBTURATION:</b>		
Gutta Percha	Fine-Medium / Medium or ProTaper Matching	Dentsply Tulsa Dental
Pulp Canal Sealer - EWT	Powder & Liquid	Kerr / Schein
5004 Touch 'N Heat	Heat Source 0.5mm plugger tip	Kerr / Schein
Pluggers	Sizes 8-12 Posterior	Schilder / Dentsply Maillefer
Calamus Flow	Gutta Percha Delivery System for backpacking	Dentsply Tulsa Dental
Calcium Hydroxide	Interappointment dressing	Pulpdent Corp / Schein

(Continued)

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>BRAND / COMPANY</b>
<b>EQUIPMENT:</b>		
EndoActivator System	Sonic Handpiece Driver & Activator Tips	Dentsply Tulsa Dental
Slowspeed Electric H.P.	Gear Reduction / DTC Motor	Dentsply Tulsa Dental
Slowspeed Electric or Air	Gear Reduction	KaVo America
Ultrasonic Unit (Piezoelectric)	P5 Ultrasonic Generator	Dentsply Tulsa Dental
Ultrasonic Instruments	ProUltra ENDO 1-5, ENDO 6-8, SINE 1-6	Dentsply Tulsa Dental
File Adapter	FA11 (file holder)	SybronEndo
Electronic Apex Locator	Root ZX	J. Morita
Microscope	A variety of choices	Zeiss
Dental Mobile Cart	Customized Endodontic Cart	ASI Medical
Digital Xray System	Digital Radiography	Schick Technologies
Dental Anatomy Website	Patient Education Tool	ToothAtlas.com

For any questions regarding the products and/or techniques presented, please contact:

**ADVANCED ENDODONTICS • CLIFFORD J. RUDDLE DDS**  
122 S. Patterson Avenue, Ste. 206, Santa Barbara, CA 93111 • (800) 753-3636 • [www.endoruddle.com](http://www.endoruddle.com)

Clifford J. Ruddle  
**ADVANCED ENDODONTICS**  
*Sources of Suppliers Discussed in*  
**V1332 Nonsurgical Removal of:**  
**Gutta Percha, Silver Points, Carriers & Paste Fillers**  
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COMPANY	TOLL FREE	FAX	PHONE	WEBSITE
Advanced Endodontics	800-753-3636	805-965-8253	805-964-8838	endoruddle.com
Aseptico	800-426-5913	360-668-8722	425-487-3157	aseptico.com
ASI Medical	800-566-9953	303-766-8584	303-766-3646	asimedical.net
Bisco	800-247-3368	800-959-9550	847-534-6000	bisco.com
Brasseler	800-841-4522	888-610-1937	912-927-8671	brasselerusa.com
C. K. Dental Specialties	800-675-2537	714-639-6991	714-639-6990	ckdental.net
CareCredit	800-859-9975	800-333-3196	--	carecredit.com
Classic Practice Resources	800-928-9289	888-841-5384	225-928-0799	metalfit.com
Dentco	800-454-9244	914-948-1711	914-682-6600	dentcorp.com
Dentsply Maillefer	800-924-7393	800-924-7389	--	maillefer.com
Dentsply Tulsa Dental Spec.	800-662-1202	918-493-6599	918-493-6598	tulsadental.com
Designs for Vision	800-727-6407	631-585-3404	631-585-3300	designsforvision.com
Ellman International	800-835-5355	516-569-0054	516-594-3333	ellman.com
Endoco	800-388-7868	866-683-6679	901-683-6677	endoco.com
Global Dental Products	--	516-785-7885	516-221-8844	gdpdental.com
Global Surgical	800-767-8726	636-861-2969	636-861-3388	globalsurgical.com
Hu-Friedy	800-483-7433	800-729-1299	877-321-4333	hu-friedy.com
J. Morita USA	888-566-7482	949-465-1095	949-581-9600	jmoritausa.com
KaVo America	800-323-8029	847-550-6825	847-550-6800	kavo.com
Life Core Biomedical	800-348-4368	952-368-3411	952-368-4300	lifecore.com
Link Ergonomics	800-424-5465	417-206-4622	417-206-4600	linkdental.com
Marquis Dental	800-359-3206	303-344-5232	303-344-5222	perio-aid.net
Moyco Precision Abrasives	800-331-8837	215-362-3809	215-855-4300	moycotech.com
Mr. Coffee	800-672-6333	--	--	mrcoffee.com
Profex Medical Products	800-325-0196	901-454-9850	901-452-7485	profexmed.com
Quality Aspirators	800-858-2121	972-298-6592	972-298-2669	qualityaspirators.com
Ranfac	800-272-6322	508-584-8588	508-588-4400	ranfac.com
Roth International Ltd.	800-445-0572	312-733-7398	312-733-1478	rothendo.com
Henry Schein	800-372-4346	800-732-7023	775-327-3200	henryschein.com
Schick Technologies	877-724-4254	718-482-2030	718-937-5765	schicktech.com
SmartPractice	800-522-0800	800-522-8329	602-225-0595	smartpractice.com
Stropko, Dr. John	--	480-563-7881	480-515-4933	stropko.com
SybronEndo	800-346-3636	714-516-7936	714-516-7979	sybronendo.com
ToothAtlas.com	--	650-854-2568	650-233-0200	eHuman.com
Ultradent	800-552-5512	800-842-9024	801-572-4200	ultradent.com
Zeiss	800-442-4020	925-557-4101	925-557-4100	zeiss.com
Zimmer Dental	800-854-7019	760-431-7811	760-431-9515	zimmerdental.com

## **PROGRAM**

### **V1332 Nonsurgical Removal of: Gutta Percha, Silver Points, Carriers & Paste Fillers**

#### **CLINICIAN RESPONSIBLE:**

**Clifford J. Ruddle, DDS**  
Founder and Director, Advanced Endodontics

#### **GOALS & OBJECTIVES**

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

1. Identify the reasons as to why an endodontic case may fail.
2. Describe appropriate patient communication tools and teamwork.
3. List the basic tools needed for the removal of obturation materials.
4. Compare the various techniques for successfully removing gutta percha.
5. Contrast the strategies for the efficient removal of silver points.
6. Identify options for the safe removal of carrier-based obturators.
7. List the techniques for successfully eliminating paste fillers.
8. Integrate the latest tips to making removal procedures easier.
9. Solve the earnings potential equation for nonsurgical retreatment.
10. Identify the five (5) steps toward mastery.

#### **OVERVIEW**

### **V1332 Nonsurgical Removal of: Gutta Percha, Silver Points, Carriers & Paste Fillers**

Previously treated teeth that are endodontically failing must be managed. This video provides step-by-step instruction for the safe and efficient removal of gutta percha, silver points, carriers, and paste fillers. The latest tips and technologies are integrated to make removal procedures easy and transferable case-to-case. The use of CDR, ultrasonics, microscopes, and rotary instrumentation are implemented to further address removal efforts. This presentation discusses the foundation for endodontic failure, the importance of patient communication and teamwork, and offers the clinician 5 steps to mastery.

Techniques in this video are demonstrated utilizing 3D graphics and animations, in plastic models, on extracted teeth, and on patients. All procedures have been performed to optimally transfer knowledge and maximize the learning experience.

## REFERENCES

### **V1332 Nonsurgical Removal of: Gutta Percha, Silver Points, Carriers & Paste Fillers**

1. Wilcox LR, Krell KV, Madison S, Rittman B: Endodontic retreatment: evaluation of gutta-percha and sealer removal and canal reinstrumentation, *J Endod* 13:9, 1987.
2. Tamse A, Unger U, Metzger Z, Rosenberg M: Gutta-percha solvents- a comparative study, *J Endod* 12:8, 1986.
3. Barbosa SV, Burkard DH, Spangberg LS: Cytotoxic effects of gutta percha solvents, *J Endod* 20:1, 1994.
4. Kaplowitz GJ: Evaluation of gutta percha solvents, *Journal of Endod* 16:11, 1990.
5. Wilcox LR: Endodontic retreatment with halothane versus chloroform solvent, *J Endod* 21:6, pp.305-307, 1995.
6. Weine FS, Rice RT: Handling previously treated silver point cases: removal, retreatment, and tooth retention. *Compend Contin Educ Dent* 7:9, 1986.
7. Goon WWY: Managing the obstructed root canal space: rationale and techniques, *J Calif Dent Assoc* 19:5, 1991.
8. Glick DH, Frank AL: Removal of silver points and fractured posts by ultrasonics, *J Prosth Dent* 55:212-215, 1986.
9. Bertrand MF, Pellegrino JC, Rocca JP, Klinghofer A, Bolla M: Removal of Thermafil root canal filling material, *J Endod* 23:1, 1997.
10. Cohen AG: The efficiency of solvents used in the retreatment of paste-filled root canals, *Masters Thesis*, Boston University, 1986.
11. Wilcox LR: Endodontic retreatment: ultrasonics and chloroform as the final step in reinstrumentation, *J Endod* 15:3, pp. 125-128, 1989.
12. Krell KV, Neo J: The use of ultrasonic endodontic instrumentation in the retreatment of paste-filled endodontic teeth, *Oral Surg* 60:100-2, 1985.
13. Jeng HW, ElDeeb ME: Removal of hard paste fillings from the root canal by ultrasonic instrumentation, *J Endod* 13:6, 1987.



## POST-TEST

### **V1332 Nonsurgical Removal of: Gutta Percha, Silver Points, Carriers & Paste Fillers**

1. The major cause of failure of completed root canal treatment is:
  - a. underfilling.
  - b. microbial leakage.
  - c. overfilling.
  - d. filling flush with the foramen.
  
2. Before initiating any retreatment procedure, a discussion with the patient should include:
  - a. what to expect during treatment.
  - b. what to expect post-treatment.
  - c. the realistic, long-term prognosis.
  - d. all of the above.
  
3. One advantage of computerized digital radiography is:
  - a. the significant reduction of radiation exposure.
  - b. the storage, retrieval, and sharing of information.
  - c. the ability to view images full screen on the monitor.
  - d. all of the above.
  
4. The working tips of the ProUltra ENDO ultrasonic instruments are:
  - a. about the same size as the smallest round bur.
  - b. five times smaller than the smallest round bur.
  - c. ten times smaller than the smallest round bur.
  - d. none of the above.
  
5. When removing gutta percha with rotary instrumentation, the preferred speed is:
  - a. around 350 RPM.
  - b. 900-1,200 RPM.
  - c. based on the clinician's experience.
  - d. dependent on the type of canal being retreated.
  
6. The best method for removing residual gutta percha deep within a canal is:
  - a. paper point wicking procedures in conjunction with a chemical solvent.
  - b. removing small bites of the gutta percha utilizing a heat source.
  - c. utilizing small-sized hand files to eliminate the gutta percha.
  - d. determined based on the particular canal being treated.
  
7. An important consideration when removing a silver point is:
  - a. the head of the silver point may extend into the pulp chamber.
  - b. space may exist between a round silver point and an irregularly shaped canal.
  - c. elemental silver is soft and can rapidly erode with direct ultrasonics.
  - d. all the above.

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

**V1332 Nonsurgical Removal of:  
Gutta Percha, Silver Points, Carriers & Paste Fillers**

8. The techniques for removing carrier-based obturators are:
- a. the techniques similarly used for gutta percha and silver point removal.
  - b. unique and must be referred to an endodontist.
  - c. mainly based on utilizing solvents.
  - d. none of the above.
9. The "hedstroem displacement technique" is most appropriate for:
- a. removing gutta percha.
  - b. removing carrier-based obturators.
  - c. removing paste fillers.
  - d. all the above.
10. When evaluating a paste-filled canal for retreatment, it is important to remember:
- a. the paste is usually the densest in the apical one-third.
  - b. some pastes are soft and penetrable while others are hard and impenetrable.
  - c. the reddish brown pastes are typically used in the United States.
  - d. all of the above.

**PLEASE PRINT**

Name \_\_\_\_\_

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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