

PRACTICAL CLINICAL COURSES

A Service of the Gordon J. Christensen
Career Development Program

V1135 Oral and Maxillofacial Digital Radiography - Simplified

Gordon J. Christensen, DDS, MSD, PhD

Materials Included

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

Gordon J. Christensen
PRACTICAL CLINICAL COURSES

PROCEDURE FOR RECEIVING
ACADEMY OF GENERAL DENTISTRY
AND STATE CREDIT
FOR CE VIDEOS

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 per dentist (limit 1 additional dentist per video purchased); \$10 per test per 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 "AGD," PCC will send notification to both the applicant and the Academy of General Dentistry. (The AGD will also notify applicant of credits earned by printout information.)
 - b. 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.
 - 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

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

Gordon J. Christensen
PRACTICAL CLINICAL COURSES

Sources of Products Discussed in

V1135 Oral and Maxillofacial Digital Radiography-Simplified

Presented by: Gordon J. Christensen, DDS, MSD, PhD & Karen Preston, RDH

1. **Digital Sensor Holders**
Schick Technologies
30-30 47th Avenue
Suite 500
Long Island City, NY 11101
(877)724-4254
(718)937-5765
www.schicktech.com
2. **Digital X-Ray Sensor Sheaths**
Patterson Dental Supply Inc.
1031 Mendota Heights Road
St. Paul, MN 55120
(800)328-5536
(615)686-1600
www.pattersondental.com
3. **Edge-Ease**
Patterson Dental Supply Inc.
1031 Mendota Heights Road
St. Paul, MN 55120
(800)328-5536
(615)686-1600
www.pattersondental.com
4. **ProMax 3D**
PLANMECA USA
100 North Gary Avenue
Suite A
Roselle, IL 60172
(630)529-2300
www.planmeccausa.com
5. **Quantum Radiation Monitoring Badge**
Quantum Products Badges
P.O. Box 19755
Irvine, CA 92623
(800)359-9686
www.quantumbadges.com
6. **Rinn Digital Sensor Loops**
Dentsply Rinn
1212 Abbott Drive
Elgin, IL 60123-1819
(800)323-0970
(847)742-1115
www.rinncorp.com
7. **Schick CDR Wireless**
Patterson Dental Supply Inc.
1031 Mendota Heights Road
St. Paul, MN 55120
(800)328-5536
(615)686-1600
www.pattersondental.com
8. **Schick CDR Wireless**
Schick Technologies
30-30 47th Avenue
Suite 500
Long Island City, NY 11101
(877)724-4254
(718)937-5765
www.schicktech.com
9. **Schick SDX**
Schick Technologies
30-30 47th Avenue
Suite 500
Long Island City, NY 11101
(877)724-4254
(718)937-5765
www.schicktech.com
10. **Sirona Galileos System**
Sirona Dental Systems LLC
4835 Sirona Drive
Charlotte, NC 28273
(800)659-5977
(704)587-0453
www.cereconline.com
11. **Soothe-Guard Protective Aprons**
Dentsply Rinn
1212 Abbott Drive
Elgin, IL 60123-1819
(800)323-0970
(847)742-1115
www.rinncorp.com
12. **Thyroid Collars**
Pacific Northwest X-Ray Inc.
P.O. Box 625
Gresham, OR 97030
(800)827-9729
(503)667-3000
www.pnwx.com
13. **Uni-Grip**
Dentsply Rinn
1212 Abbott Drive
Elgin, IL 60123-1819
(800)323-0970
(847)742-1115
www.rinncorp.com
14. **Universal Sensor Sheaths**
Schick Technologies
30-30 47th Avenue
Suite 500
Long Island City, NY 11101
(877)724-4254
(718)937-5765
www.schicktech.com
15. **XCP-DS System**
Dentsply Rinn
1212 Abbott Drive
Elgin, IL 60123-1819
(800)323-0970
(847)742-1115
www.rinncorp.com

16. **X-Ray Aprons**

DUX Dental

600 East Hueneme Road

Oxnard, CA 93033-8600

(800)833-8267

(805)488-1122

www.duxdental.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

V1135 Oral and Maxillofacial Digital Radiography - Simplified

CLINICIAN RESPONSIBLE

Karen Preston, BS, RDH
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. List commonly used radiographs in general dentistry.
2. List less frequently used radiographs in general dentistry.
3. Describe typical staff responsibilities in radiography.
4. Describe differences between analog and digital radiography.
5. List advantages of digital dental radiography.
6. Compare radiation exposure provided by dental radiographs to everyday unavoidable radiation in the environment.
7. Describe radiation protection for patients.
8. Describe radiation protection for dental staff.
9. Describe the advantages of panoramic radiographs.
10. Compare intraoral and extraoral radiographs.
11. Discuss radiograph sensor positioning devices.
12. List disadvantages of digital dental sensors.
13. Describe the technique for periapical radiographs of maxillary molars.
14. Describe the technique for periapical radiographs of maxillary premolars.
15. Describe the technique for periapical radiographs of maxillary canines.
16. Describe the technique for periapical radiographs of maxillary incisors.
17. Describe the technique for periapical radiographs of mandibular molars.
18. Describe the technique for periapical radiographs of mandibular premolars.
19. Describe the technique for periapical radiographs of mandibular canines.
20. Describe the technique for periapical radiographs of mandibular incisors.

OVERVIEW

V1135 Oral and Maxillofacial Digital Radiography - Simplified

The change from analog to digital radiography has been a slow, but very positive move. The change has been going on for over 20 years, and still some practitioners do not use digital radiography. This presentation is oriented toward digital radiography for daily use in typical dental practices. This video includes information about:

- Commonly used radiographs in dental practice
- Other oral and maxillofacial radiographs
- Staff responsibilities for radiography
- Digital vs. analog radiography
- Radiation exposure for oral and maxillofacial radiography compared to daily radiation dose
- Radiation protection for patients
- Radiation protection for staff
- Extraoral radiographs
- Panoramic radiographs
- Panoramic radiograph techniques
- Extraoral bitewing radiographs
- Intraoral radiographs and full-mouth periapical series
- Intraoral radiograph positioning devices
- Intraoral radiograph sensors
- Taking bitewing radiographs
- Taking maxillary molar periapical radiographs
- Taking maxillary premolar periapical radiographs
- Taking maxillary canine periapical radiographs
- Taking maxillary central and lateral incisor periapical radiographs
- Taking mandibular molar periapical radiographs
- Taking mandibular premolar periapical radiographs
- Taking mandibular canine periapical radiographs
- Taking mandibular central and lateral radiographs
- Infection control for digital radiography
- The future of oral and maxillofacial radiography

The video is oriented toward information that can easily be implemented into daily practice.

REFERENCES

V1135 Oral and Maxillofacial Digital Radiography - Simplified

1. Kaeppler G, Dietz K, Reinert S. Diagnostic accuracy of in vitro panoramic radiographs depending on the exposure. *Dentomaxillofac Radiol.* 2007 Feb; 36(2):68-74.
2. Berkhout WE, Sanderink GC, Van der Stelt PF. A comparison of digital and film radiography in Dutch dental practices assessed by questionnaire. *Dentomaxillofac Radiol.* 2002 Mar; 31(2):93-9.
3. Schulze RK, Rosing ST, D'Hoedt B. Contrast perception in digitized panoramic radiographs compared with their film-based origin. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2002 Sep; 94(3):388-94.
4. Farman AG, Avant SL, Scarfe WC, Farman TT, Green DB. In vivo comparison of Visualix-2 and Ektaspeed Plus in the assessment of periradicular lesion dimensions. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 1998 Feb; 85(2):203-9.
5. Khan EA, Tyndall DA, Ludlow JB, Caplan D. Proximal caries detection: Sirona Sidexis versus Kodak Ektaspeed Plus. *Gen Dent.* 2005 Jan-Feb; 53(1):43-8.
6. Svanaes DB, Moystad A, Larheim TA. Approximal caries depth assessment with storage phosphor versus film radiography. Evaluation of the caries-specific Oslo enhancement procedure. *Caries Res.* 2000 Nov-Dec; 34(6):448-53.
7. Burger CL, Mork TO, Hutter JW, Nicoll B. Direct digital radiography versus conventional radiography for estimation of canal length in curved canals. *J Endod.* 1999 Apr; 25(4):260-3.
8. Palomo JM, Rao PS, Hans MG. Influence of CBCT exposure conditions on radiation dose. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2008 Jun; 105(6):773-82. Epub 2008 Apr 18.
9. Sumer AP, Sumer M, Güler AU, Biçer I. Panoramic radiographic examination of edentulous mouths. *Quintessence Int.* 2007 Jul-Aug; 38(7):e399-403.
10. American Dental Association Council on Scientific Affairs. The use of dental radiographs: update and recommendations. *J Am Dent Assoc.* 2006 Sep; 137(9):1304-12.
11. Bhaskaran V, Qualtrough AJ, Rushton VE, Worthington HV, Horner K. A laboratory comparison of three imaging systems for image quality and radiation exposure characteristics. *Int Endod J.* 2005 Sep; 38(9):645-52.

POST TEST

V1135 Oral and Maxillofacial Digital Radiography - Simplified

1. Digital periapical radiographs:
 - a. require wired sensors.
 - b. allow more possibility to direct radiation perpendicular to the image than analog radiographs.
 - c. require less radiation than analog radiographs.
 - d. may not be printed into hard copy form.

2. Placing lead aprons on patients receiving oral periapical radiographs:
 - a. is a Federal requirement.
 - b. is an elective procedure.
 - c. is necessary because of the significant radiation exposure required by digital radiographs.
 - d. is never requested by patients.

3. Staff members making digital radiographs:
 - a. should always wear radiation exposure badges.
 - b. should wear thyroid protection shields.
 - c. are exposed to a significant amount of radiation by digital radiographs.
 - d. are not required to wear radiation exposure badges.

4. Panoramic digital radiographs:
 - a. show only a small amount of the anatomy usually considered to be associated with dentistry.
 - b. can provide excellent screening observation.
 - c. require far more radiation than a full-mouth series of digital radiographs.
 - d. replace all other forms of typical oral radiographs.

5. Extraoral digital bitewing radiographs:
 - a. show only the coronal portions of the teeth.
 - b. are highly diagnostic for initial dental caries.
 - c. are very useful for educating patients about their oral condition.
 - d. require more radiation than panoramic radiographs.

6. Extraoral digital bitewing radiographs:
 - a. show more oral anatomy than intraoral digital bitewings.
 - b. require a minimal amount of radiation.
 - c. may be produced on radiographic machines that have a special feature reducing overlap of tooth contacting areas when compared to conventional bitewing radiographs.
 - d. all of the above.

POST TEST (CONT'D)

V1135 Oral and Maxillofacial Digital Radiography - Simplified

7. A full-mouth series of periapical radiographs:
 - a. should be made every 2 years.
 - b. usually has two images for each posterior segment.
 - c. usually has three images for each posterior segment.
 - d. can always be made using the long-cone technique.

8. Guidelines related to frequency of recall radiographs:
 - a. suggest that frequency of radiographs should be related directly to the patient's oral condition.
 - b. are the same for every adult patient.
 - c. suggest bitewing radiographs for every child each 5 years.
 - d. suggest panoramic radiographs for every adult every 3 years.

9. Edentulous patients should have digital radiographs:
 - a. when a denture sore spot is observed.
 - b. when they are considered necessary.
 - c. once every 5 years.
 - d. none of the above.

10. Intraoral digital radiographs should be made by:
 - a. aiming the radiation beam perpendicular to the facial surface of the teeth being radiographed.
 - b. aiming the radiation beam directly passing through as many contact areas as possible.
 - c. aiming the radiation beam perpendicular to the facial surface of the gingiva and therefore, the underlying bone.
 - d. all of the above.

PLEASE PRINT

Name _____

Name of video purchaser (if different from above) _____

Address _____

City/State/Zip _____

Phone No. _____

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

AGD No. _____

State License No. _____