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Career Development Program

V1174 Implementing Cone Beam CT Imaging into Your Practice

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Sources of Products Discussed in

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Presented by: Dale A. Miles, DDS, MS, FRCD(C) & Gordon J. Christensen, DDS, MSD, PhD

1. **Carestream 3D Imaging Solution**
Carestream Dental LLC
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Atlanta, GA 30339
(800)944-6365
www.carestreamdental.com
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Henry Schein
135 Duryea Road
Melville, NY 11747
(800)372-4346
(631)843-5500
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2200 Fletcher Avenue
Suite 705A
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(888)396-6872
(201)210-5028
www.vatechamerica.com
6. **ProMax**
Planmeca USA, Inc.
100 North Gary Avenue
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Roselle, IL 60172
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PROGRAM

V1174 Implementing Cone Beam CT Imaging into Your Practice

CLINICIANS RESPONSIBLE:

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GOALS & OBJECTIVES

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

1. Discuss the evolution of cone beam radiology into dentistry.
2. Discuss the possibility that cone beam will become standard of care in dentistry.
3. List the current common uses of cone beam in dentistry.
4. List which type of practitioner will probably use cone beam most.
5. Compare the radiation dose of cone beam to periapical and bitewing radiographs.
6. Discuss the potential for upgrading panoramic devices to cone beam.
7. Discuss the potential need for modifying your dental office when incorporating cone beam into your practice.
8. Discuss the current cost of cone beam devices.
9. Discuss the need for more computer storage in your office when integrating cone beam.
10. Compare diagnostic and treatment planning software for cone beam.
11. Describe field of view as related to cone beam.
12. List some methods of using cone beam for patient education.
13. Discuss the potential for cone beam in endodontics.
14. Discuss the potential for cone beam when removing impacted teeth.
15. Discuss the potential for cone beam when encountering dilacerated teeth.
16. Discuss the potential for cone beam use in implant planning and placement.
17. Discuss the legal risk of using cone beam relative to occult pathology.
18. Discuss recording cone beam findings.
19. List ways to incorporate cone beam into your practice.
20. Define oral and maxillofacial radiologists and how to find them.

OVERVIEW

V1174 Implementing Cone Beam CT Imaging into Your Practice

Cone beam radiology has had a significant influence on dentistry over the past 15 plus years. However, the expense of incorporating it into practice has limited its acceptance. Currently, prices for this technology have come down significantly and more dentists are purchasing cone beam units.

This concept is extremely valuable for especially: endodontics, removal of impacted teeth, and implant planning and placement.

This video includes the following information:

- Evolution of cone beam - a historical perspective
- Will cone beam become standard of care?
- What are the current common uses of cone beam?
- Which type of practitioner needs cone beam?
- What is the average cone beam radiation dose in microsieverts?
- A comparison of the various types of cone beam machines
- Office facility changes needed
- Typical costs for cone beam
- Imaging software: diagnostic vs. treatment planning
- Field of view
- Patient education
- Use in endodontics
- Finding lateral endodontic canals
- Removing impacted teeth
- Identifying dilacerated roots
- Planning and placing implants
- Identifying implant placement problems
- Risk and liability: occult pathology
- Risk and liability: reporting
- What are oral and maxillofacial radiologists, where to find them, and how to use them?
- Obtaining access to cone beam

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POST-TEST

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1. Radiation dosage of an average cone beam image is:
 - a. similar to a standard medical CT scan.
 - b. prohibitive.
 - c. much lower than an average medical CT scan.
 - d. lower than an average medical CT scan.

2. When placing cone beam in your office, an average dental office computer system:
 - a. will usually be adequate for image storage.
 - b. will need to be increased in storage capacity.
 - c. must be completely changed.
 - d. none of the above.

3. Field of view for cone beam:
 - a. is one standard size only.
 - b. does not relate to radiation dose.
 - c. should be set as large as possible.
 - d. should be set at a size that shows the area being treated.

4. When buying a digital panoramic device:
 - a. cone beam can be added to any current panoramic device.
 - b. cone beam is already present when you buy most panoramic devices.
 - c. make sure the panoramic device can allow cone beam to be added later.
 - d. none of the above.

5. Use of cone beam in endodontics:
 - a. often shows canals not shown on 2D devices.
 - b. often shows additional roots not shown on 2D devices.
 - c. can show dilacerated roots.
 - d. all of the above.

6. The three most common uses of cone beam currently are:
 - a. endo, perio, oral surgery.
 - b. endo, impactions, implants.
 - c. pedo, oral surgery, perio.
 - d. pedo, endo, implants.

7. Changes in your physical facility when incorporating cone beam:
 - a. requires lead in the walls.
 - b. is standard from one geographic area to another.
 - c. varies from one geographic area to another.
 - d. requires one layer of plaster board, which is considered to be adequate radiation protection.

POST-TEST (CONT'D)

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- 8. The high cost of cone beam:
 - a. should restrict you from incorporating it into your practice.
 - b. does not vary from one manufacturer to another.
 - c. is soon paid back as you learn to use the device.
 - d. requires a high clinical fee.

- 9. Use of cone beam in implant dentistry:
 - a. is limited to planning implant placement.
 - b. is limited to making guides for implant placement.
 - c. is helpful in both planning and placing implants.
 - d. is not necessary.

- 10. Relative to standard of care in dentistry:
 - a. cone beam is standard of care in all areas of dentistry.
 - b. cone beam is rapidly becoming standard of care in endo, implants, and impactions.
 - c. cone beam is rapidly becoming standard of care in oral surgery, endo, and perio.
 - d. cone beam is not predicted to become standard of care in dentistry.

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