2017 Oregon Dental Conference®
Course Handout

Steven Gold, DDS
Course 8168: “Soft Landings: An Evidence-based Approach to Minimizing CAD/CAM Catastrophes”
Saturday, April 8
8 am - 11 am
Soft Landings: An Evidence-based Approach to Minimizing CAD/CAM Catastrophes

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Part 1: Learning Objectives

1. Learn what the evidence in the peer-reviewed literature says about the clinical success of CAD/CAM restorations.

2. Learn why there are limitations to the peer-reviewed literature on CAD/CAM dentistry.

3. Learn what scientific evidence is exists comparing different commercially-available CAD/CAM systems.

4. Learn what the literature shows us about the success of all-ceramic materials used in CAD/CAM dentistry.

5. Following the principles of evidence based dentistry, learn the foundations of a clinical protocol for CAD/CAM, including treatment planning, preparation design, scanning, restoration design, milling, and cementation.

6. By evaluating clinical mistakes, learn how to minimize or avoid them.
Part 2: Articles Referenced

General


**Materials**


Lin, W.-S., Ercoli, C., Feng, C. and Morton, D. (2012), The Effect of Core Material, Veneering Porcelain, and Fabrication Technique on the Biaxial Flexural Strength

**Restoration Type**


Tooth Preparation


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Scanning and Design

**Cementation**


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**Part 3: Post Test**

1. Which of the following is true about scanning and digital impressions?
   a. Digital impression accuracy is at the same level as conventional impressions for crowns.
   b. Digital impression accuracy is at the same level as conventional impressions for full arch impressions.
   c. Digital impressions have been proven inaccurate and should not be used for tooth restorations.
   d. Digital impressions are only compatible with chairside CAD/CAM units and cannot be used for laboratory fabricated restorations.

2. According to the most current systematic review on clinical performance, what is the 5 year survival rate for single-tooth CAD/CAM restorations?
   a. 98.5%
   b. 95.6%
   c. 91.6%
   d. 82%
3. The chairside CAD/CAM material with the highest flexural strength is:
   a. Zirconia
   b. Lithium disilicate
   c. Polymer-infiltrated reinforced glass network
   d. Lithium silicate/phosphate

4. Which of the following types of restorations demonstrate a clinical survival rate of less than 90%?
   a. Inlays and onlays
   b. Fixed partial dentures
   c. Anterior single unit crowns
   d. Posterior single unit crowns

5. Which of the following is not an advantage of CAD/CAM restorations?
   a. Conservation of tooth structure
   b. Single appointments for restorations possible
   c. Minimal cost investment and learning curve
   d. No provisional restoration needed

6. Which of the following is a desired feature of tooth preparations for CAD/CAM restorations?
   a. Sharp internal line angles
   b. A 0.5 mm deep shoulder-bevel margin
   c. Proximal margins in contact with adjacent teeth
   d. Continuous enamel margins

7. True or False: There are abundant clinical studies showing that immediate dentin sealing increases the clinical survival rate of all ceramic restorations.
   a. True
   b. False
8. True or False: Restorations produced by the CEREC system show better marginal fit than those produced by the E4D system.
   a. True
   b. False

9. Which of the following is not part of the official balloonists’ prayer?
   a. Fair winds
   b. Friendly fields
   c. Soft landings
   d. Cold Champagne

Part 4: Answer Key
1. a
2. c
3. a
4. b
5. c
6. d
7. b
8. a
9. d, although all certainly are important