

Integrating AI in Periodontal Classifications: Enhancing the Patient Experience



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CE Credits: 1.5 hours

Intended Audience: Dentists, Dental Hygienists, Dental Students, Dental Hygiene Students, Dental Assistants, Dental Assisting Students, Dental Educators, Office Managers

Date Course Online: 03/21/2025

Last Revision Date: NA

Course Expiration Date: 03/20/2028

Cost: Free

Method: Self-instructional

AGD Subject Code(s): 490

Online Course: www.dentalcare.com/en-us/ce-courses/ce695

Disclaimers:

- P&G is providing these resource materials to dental professionals. We do not own this content nor are we responsible for any material herein.
- Participants must always be aware of the hazards of using limited knowledge in integrating new techniques or procedures into their practice. Only sound evidence-based dentistry should be used in patient therapy.

Conflict of Interest Disclosure Statement

- Ms. Dryer reports no conflicts of interest associated with this course. She has no relevant financial relationships to disclose.

Short Description

Explore how artificial intelligence is transforming periodontal classifications, improving diagnostic accuracy, and enhancing the overall patient experience in dental care. This article delves into the integration of AI technologies to optimize periodontal treatment and outcomes.

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Overview

This course explores the integration of artificial intelligence in periodontal classifications to enhance diagnostic precision and improve patient care. Participants will learn how AI can streamline the classification process, enable more accurate assessments of periodontal health, and optimize treatment plans. The course also highlights the positive impact of AI on the overall patient experience, including quicker diagnosis, personalized homecare recommendations, and better long-term outcomes. Designed for dental professionals, this course provides practical insights into implementing AI-driven tools to enhance periodontal care.

Learning Objectives

Upon completion of this course, the dental professional should be able to:

- Understand the role of Artificial Intelligence in diagnosing and classifying periodontal conditions
- Explore enhanced clinical decision-making with AI-supported data
- Apply evidence-based practices in patient education and care planning according to their periodontal classification
- Review homecare recommendations for patients at risk of periodontal disease and gingivitis with AI considerations

Video: Integrating AI in Periodontal Classifications: Enhancing the Patient Experience



[Click on image to view video online.](#)

Course Test Preview

To receive Continuing Education credit for this course, you must complete the online test. Please go to: www.dentalcare.com/en-us/ce-courses/ce695/test

1. What is the primary role of AI in dentistry?

- A. To replace dentists
- B. To combine computer science and data sets for problem solving
- C. To create new dental instruments
- D. To automate dental procedures

2. How is machine learning primarily used for in dentistry?

- A. To create new treatment methods
- B. To analyze structured data for diagnostic predictions
- C. To replace medical professionals
- D. To store patient records

3. How does deep learning differ from machine learning?

- A. Deep learning is a subset of machine learning with enhanced decision-making capabilities.
- B. Deep learning is used solely for storing data.
- C. Deep learning only processes unstructured data.
- D. Deep learning doesn't involve data analysis.

4. Why do dental AI software products used by dentists need FDA clearance?

- A. To ensure they are compatible with other software
- B. To allow them to be sold internationally
- C. Software intended to provide a diagnosis is considered a medical device and therefore requires FDA clearance
- D. To make them available for free to dentists

5. What is the main function of natural language processing (NLP) in systems like Alexa and Siri?

- A. To generate computer code for new applications
- B. To improve system accuracy by learning from user voice interactions
- C. To store voice recordings for future use
- D. To process only written text data

6. What is gingivitis a precursor to?

- A. Tooth decay
- B. Periodontal disease
- C. Oral cancer
- D. Enamel erosion

7. What does "CAL" refer to in periodontal assessment?

- A. The measurement of tooth decay
- B. The level of enamel erosion
- C. The number of cavities present
- D. Clinical attachment loss

8. What does the term “incipient” refer to in the context of gingivitis?

- A. Severe gum disease affecting the entire mouth
- B. Gingivitis affecting less than 10% of the mouth
- C. Total tooth loss due to gum infection
- D. Inflammation of the gums with no signs of infection

9. What is the typical crestal level of the bone in normal health or gingivitis?

- A. 0.5mm to 1mm below the CEJ
- B. 1.5mm to 2mm below the CEJ
- C. 2.5mm to 3mm below the CEJ
- D. 3mm to 4mm below the CEJ

10. What are the benefits of stannous fluoride?

- A. It reduces plaque levels, prevents tooth decay, and acts as a desensitizing agent
- B. It only prevents tooth decay and strengthens enamel
- C. It whitens teeth and prevents gum recession
- D. It increases plaque buildup and causes tooth sensitivity

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Additional Resources

- No Additional Resources Available

About the Author

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Marianne Dryer is one of dental industry's most outspoken educators on subjects of periodontal instrumentation and a champion of early and advanced introduction to ultrasonic instrumentation into dental hygiene curriculums. Her dynamic presentations, articulate academic instruction, and insightful curriculum development consultation are founded on more than 30 years of oral health experience. As such, Marianne is sought after nationally and internationally for her presentations on ultrasonic technique, risk assessment, infection prevention and radiology technique. Marianne is currently the Program Director at Cape Cod Community College and also provides faculty in service programs on the 2018

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