



Academy of Prosthodontics 2024 Annual Scientific Session Four Seasons Hotel, Denver, Colorado May 29 – June 1, 2024

Program Speaker – Mohamed Fayad

Title

Cracking the "Cracked Tooth Code" Utilizing AI Technology: A New Perspectives on Diagnosis, CBCT Imaging, Treatment Strategies, and Outcomes

Abstract

A lack of consensus exists among dentists and endodontists in cracked teeth diagnosis and treatment. Accurate clinical evaluation, imaging and diagnosis is paramount to properly treatment planning cracked teeth. With the resurgence of the philosophy of saving compromised teeth over extraction, and our patients desire to save their teeth, the question remains: "Which cracked teeth should be treated and which cracked teeth should be extracted?"

This presentation will address the classification and diagnosis of different types of cracks and the role of AI imaging technology in early diagnosis and detection. Based on the AI technology information, the prognosis and changes in treatment protocols and outcomes of cracked teeth will be presented.

Learning Objectives

1. Understand the different types and prognosis of marginal ridge cracks and vertical root fractures (longitudinal tooth fractures).
2. Understand the role of CBCT in identifying cracked tooth types, extent of the fractures, and early bone pattern changes associated with cracked teeth.
3. Understanding the workflow of incorporating AI technology into the early diagnosis and decision making of longitudinal tooth fracture treatment.

Biography

MOHAMED FAYAD, DDS, MS, PHD

Dr. Fayad received his DDS in 1985 from the College of Dentistry, Cairo University. Dr. Fayad received his Master's in Oral Sciences in 1994 from the University of Buffalo at New York. He received his PhD in 1996 as a joint supervision between University of Buffalo at New York and Cairo University. He received his Endodontic training at the college of Dentistry at UIC. Currently he is the director of endodontic research, and a clinical associate professor in the Endodontic department at College of Dentistry at UIC, dividing his time between teaching, research, intra-and extra-mural continuing education and private practice. Dr. Fayad co-chaired AAE/AAOMR committee drafting the joint position statement on CBCT (2015). He has numerous publications and chapters in peer reviewed journals and textbooks. He is the co-editor of the CBCT text book (3-D Imaging in Endodontics: A new Era in diagnosis and treatment) by Springer (2016 and 2023). He is a recipient of the Calvin D. Torneck Part-Time Educator Award for 2022 by the American Association of Endodontists. He is a Diplomate of the American Board of Endodontics and gave numerous presentations nationally and internationally.