DENTAL LEARNING



BENEATH THE SURFACE

Pseudomonas aeruginosa, Biofilm Warfare, and Dental Implant Failure

Monday, July 28, 2025 @ 8:00PM ET/5:00PM PT

Complimentary 1-CE Live Webinar

Pseudomonas aeruginosa is a resilient, biofilm-forming, opportunistic pathogen increasingly implicated in the failure of dental implants. It's remarkable adaptability, antibiotic resistance, and ability to thrive in dysbiotic environments make it a formidable opponent in both acute and chronic infections. This presentation explores the multifaceted role of P. aeruginosa in oral implantology—from its molecular virulence arsenal and biofilm physiology to its synergistic interactions with other pathogens and its role in provoking peri-implant inflammation and bone loss. Bridging microbiology with clinical practice, we examine the latest evidence on how P. aeruginosa colonizes implant surfaces, evades host defenses, and contributes to implant failure. Emphasis will be placed on evidence-based prevention strategies, novel antimicrobial approaches, and future research avenues aimed at neutralizing this microbial threat and preserving implant success.

LEARNING OBJECTIVES

After completing this webinar, participants will be able to:

- Describe the biological and pathogenic characteristics of Pseudomonas aeruginosa.
- Illustrate the processes of biofilm development, antimicrobial resistance, and immune evasion utilized by P. aeruginosa.
- Evaluate clinical and laboratory evidence linking P. aeruginosa to peri-implant mucositis and peri-implantitis.
- Apply current and emerging strategies for the prevention, diagnosis, and management of P. aeruginosa-associated implant complications.

THIS WEBINAR IS PROUDLY SUPPORTED BY



FEATURED SPEAKER ANNE O. RICE, RDH, BS, FAAOSH, CDP

Anne is a clinical dental hygienist, speaker, writer, and consultant. She received her preceptor for the Bale/Doneen method, is a certified dementia practitioner, and a longevity specialist with the Alzheimer's Research and Prevention Foundation, where she has developed curriculum. She is a fellow with AAOSH and is on their advisory board as well as Cloud Dentistry's Empowering Women Panel. Anne has published her manuscript Alzheimer's Disease and Oral-Systemic Health for Frontiers, as well as her column for RDH magazine focusing on oral systemic health. She is also on their 2024 editorial advisory board. She was chosen as a recipient of the 2024 Sunstar award of distinction and has been included in an international consortium of a diverse network of brain researchers, clinicians, and institutions who support Alzheimer's prevention. Her consulting has brought her to Weill Cornell Medical Center's Alzheimer's Prevention Clinic, Florida Atlantic College Center for Brain Health, and the Atria Institute.





