American Academy of Maxillofacial Prosthetics
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Omni Austin Downtown, Austin, Texas

Program Speaker – Sudarat Kiat-Amnuay, DDS, MS, FACP, FAAMP, BCCA

Title
Facial Silicone Prosthesis Longevity: Lessons Learned Over the Past Five Decades

Abstract
Successful extraoral maxillofacial prostheses provide long-lasting, pleasing esthetic results and enables improvement in the patient's quality of life. There are many reports of dissatisfaction and reduced lifetime of facial prostheses. The challenge to clinicians is not only to use their artistic skills but to understand the science behind the materials used to improve the longevity of the prosthesis and with it, patient satisfaction. This presentation will summarize the relevant evidence-based literature in the past half century related to facial prosthetic materials, especially those commonly used, based on the 2010/2020 international surveys, to help clinicians choose materials and fabrication techniques that improve the clinical life span of the facial prosthesis. The best combinations of commonly used silicone elastomer/pigments/opacifiers, based on color stability and mechanical properties will be presented, subjected to different aging protocols. Clinical implications will be provided to understand the effects and side effects of combinations of silicone and ancillary materials used on the long-term success of prostheses. Recommended future lines of research and advancements in technology to focus on clinical and laboratory studies in facial prosthetic materials will be discussed to help guide clinicians and researchers.

Biography
Dr. Sudarat Kiat-amnuay is a tenured professor and AEGD program director at the University of Texas School of Dentistry at Houston and a section head of maxillofacial prosthodontics, Houston Center for Biomaterials and Biomimetics. She also holds a joint appointment as an adjunct professor at the University of Texas MD Anderson Cancer Center.

Dr. Kiat-amnuay's team focuses their research on color stability and mechanical properties to find the best combinations of silicone/pigment/opacifier used to make facial prostheses last longer. She also has experience in conducting randomized controlled clinical trials related to maxillofacial prosthetics. Dr. Kiat-amnuay is actively engaged in clinical practice, teaching, research and administration. She has been awarded almost $5 million in grant funding, several from federal agencies (as a principal and co-principal investigator). She is a reviewer for several journals including Nature Publishing Group and was a grant panel reviewer for a federal granting agency.