



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

Program Speaker – Susanne Scherrer

Title

5 Years RCT of Implant-Retained Monolithic Chairside-Made CAD/CAM Hybrid Abutment Single Crowns (Enamic and LiDS)

Abstract

Available ceramic CAD/CAM blocs of lithium disilicate and a polymer infiltrated ceramic network (Enamic) containing a screw channel for chairside-made crowns to be adhesively cemented to a titanium base abutment and screw-retained to an implant are appealing to the clinician, considering the time efficiency (one appointment) and overall lower costs than PFM crowns as no dental laboratory is involved. This multicentric RCT involved 6 private practices and 1 University Clinics of Dental Medicine. A total of 90 crowns were randomly distributed into 3 groups of material (G0 PFM, G1 Li2Si, G2 Enamic) each of which included 15 molars and 15 premolars. The CAD/CAM crowns were adhesively cemented to titanium base abutments (Ti Base) and screw-retained to titanium implants (Straumann Standard Plus). The presentation will discuss 5 year survival of such chair-side produced hybrid abutment crowns as compared to the classic PFM with outcomes such as fracture, debonding and unscrewing events.

Learning Objectives

1. Get familiarized with chairside made hybrid-abutment crowns
2. Receive a 5 year observation time feed-back of a multicentric Randomized controlled trial (RCT)
3. Findings are discussed with respect to materials sciences with limitations highlighted

Biography

SUSANNE SCHERRER

Professor Susanne Scherrer received her D.D.S (1984), her doctorate (1986) and her Privat Docent (2003) from the University Clinics of Dental Medicine, University of Geneva, Switzerland.

She is Full Professor in the Division of Fixed Prosthodontics-Biomaterials, Head of Biomaterials and Head of Continuing Education. Prof. Scherrer is the current President of the University Clinics of Dental Medicine (2022-2025). She is a Fellow of the Academy of Dental Materials and Academy of Prosthodontics. She has served as President of the Academy of Dental Materials (2002-2004), and President of the Dental Materials Group of the IADR (2001-2002). In 2014 she was awarded the IADR-Distinguished Scientist Wilmer Souder Award from the Dental Materials Group.

Her primary area of research and publishing involves dental ceramics, mechanical properties, clinical longitudinal trials and failure analysis using fractography. She has worked as a general practitioner from 1984 until 2015 in extramural family private practices half of her time. She currently serves on the Editorial Boards of the JADA Foundation Science, the JDR and the Swiss Dental Journal.