

Dr. Judy Yuan

Title

Effect of Brushing and Aging on Shade and Surface Roughness of CAD/CAM All-Ceramic Restorations

Abstract:

With the advent of computer-aided design/computer-aided manufacturing (CAD/CAM) technology, many restorations are fabricated through digital processes rather than via the traditional approaches. CAD/CAM restorations have been shown to be cost-effective; exhibit comparable survival rates; and acceptable shade, contour, and marginal adaptation compared to conventionally fabricated restorations. The most commonly used CAD/CAM restorations are monolithic lithium disilicate glass ceramic and zirconia due to their promising physical, biological, and esthetic properties. Many studies have investigated toothbrush abrasion and ageing on the surface texture on composite restoration, feldspathic and pressable ceramic materials but not on the ceramic CAD/CAM restorations. This presentation will provide findings of tooth brushing and aging on the color stability and surface roughness of surface colored and glazed CAD/CAM all-ceramic restorations.

Learning Objectives

1. To understand the effect of brushing, aging and combination of both as a function of time on the color stability of the selected ceramic materials
2. To understand the effect of brushing, aging and combination of both as a function of time on the surface roughness of the selected ceramic materials
3. To understand the possible relationship of color stability and surface roughness after brushing, aging and combination of both as a function of time

Biography

Dr. Judy Chia-Chun Yuan is an Assistant Professor and Director of Predoctoral Implant Education, the University of Illinois at Chicago, College of Dentistry. She received her BA from the University of California at Berkeley and her DDS, Certificate in Prosthodontics and MS in Oral Sciences from the State University of New York at Buffalo. She participated as an International Team for Implantology Scholar in Bern, Switzerland, and is a Diplomate of the American Board of Prosthodontics and a Fellow of American College of Prosthodontists. Dr. Yuan is the author of several peer-reviewed papers and has received national teaching awards at the organizational level, as well as from UIC. She has served on the Editorial Review Board for the Journal of Dental Education and Journal of Prosthodontics.