



AMERICAN ACADEMY OF FIXED PROSTHODONTICS 2012 SCIENTIFIC SESSION

SATURDAY, FEBRUARY 25, 2012



**CHERYLYN SHEETS,
DDS**

BIOGRAPHICAL SKETCH:

Dr. Cherilyn Sheets maintains a full-time private practice in Newport Beach, California for esthetic rehabilitative dentistry. She is an international educator, clinician, author and lecturer, and received the 2002 Gordon Christensen Award for Excellence in Lecturing, the 2004 USC School of Dentistry Alumnus of the Year Award, the 2006 Section Honor Award (Distinguished Dentist Award) from the California Section of the Pierre Fauchard International Honor Dental Academy, and the 2008 Dr. Edward B. Shils Entrepreneurial Education Fund Award. She is a past president of the American Academy of Esthetic Dentistry and the American Association of Women Dentists.

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LECTURE TITLE: “Quantitative Percussion Diagnostics: A New Dental Assessment Tool for Structural Integrity”

LECTURE SYNOPSIS:

During the last decade, a new technology has been explored that will give additional diagnostic information to the clinician. Quantitative percussion testing allows a clinician to evaluate the structural stability of natural teeth or dental implants by measuring the way it responds to a light impact on the buccal surface. The energy that is returned to the handpiece is analyzed in a manner that provides two pieces of information—the loss coefficient (LC) and an energy-return graph (ERG) of the structure tested. These two pieces of information can give the clinician indications of how sound the tested structure is and whether there are problems such as dentinal cracks and fractures, microleakage, recurrent decay, loose post and cores and other structural defects. By having an indication as to how a tooth or implant responds to mechanical stress prior to starting restorative care, the clinician will be prepared to look for potential problems where abnormal ERG's are observed. ERGs also help patients understand the bioengineering challenges that some teeth present due to crack propagation and other serious biomechanical problems. Combined with video documentation of the defect, it creates a simultaneous powerful documentation and patient educational tool simultaneously.

Objectives:

- To highlight the biomechanical importance and interaction of oral structures and their restorations.
- To better understand how percussion can be a diagnostic risk assessment aid.
- To explore the effectiveness of current diagnostic modalities to evaluate structural stability of teeth and implants.