

특강 III (Special Lecture III)

## Minimally invasive protocols for periodontal and implant therapy



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A variety of protocols are available for the construction of periodontally compromised sites. Some of the obstacles for patient acceptance include the morbidity associated with the procedures. Minimally invasive procedures entail smaller access and reduced manipulation of areas surrounding the therapeutic target. An array of enabling technologies have been developed to facilitate minimally invasive therapies, which include: 1) imaging technologies, such as computed tomography (CT), as well as cone beam computed tomography (CBCT) 2) interactive imaging software for pre-operative treatment planning; 3) computer assisted rapid prototyping, which is used in construction of more precise surgical guides; 4) surgical microscope for enhanced magnification; 5) growth factors and biomaterials to reduce the need for autogenous donor tissues and 6) surgical instrumentation such as piezosurgery. This presentation will illustrate novel approaches for augmentation of periodontal and implants sites. Hard and soft tissue augmentation techniques using autogenous tissues, as well as growth factors and biomaterials will be discussed.

Educational objectives:

- ▶ Minimally invasive surgery for bone and soft tissue augmentation in periodontal and implant sites
- ▶ Autogenous donor tissue advantages and limitations
- ▶ The application of growth factors on root coverage and periodontal regeneration
- ▶ The application of orthodontics in correcting hard and soft tissue deformities
- ▶ Extraction socket and edentulous ridge preservation and augmentation
- ▶ Imaging technologies available for three-dimensional survey of implant patients
- ▶ Interactive imaging software for implant site selection and treatment planning

- ▶Computer-assisted surgical guide fabrication and transfer of the treatment plan to the surgical field
- ▶The application of short implants for avoidance of augmentation surgery

주요 학력 및 경력:

Associate Professor at the University of Southern California (USC), School of Dentistry Diplomate of the American Board of Periodontology.

DDS, USC School of Dentistry(1987)

Ph. D in immunology and advanced clinical education in Periodontology, University of Connecticut, Schools of dental medicine and medicine.

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Advisory panel to the Center for Scientific Review of the National Institutes of Health. Director of USC periodontal and implant symposium, as well as the USC Comprehensive Surgical & Restorative Implant Training Program