

The Bulletin

Spring 2000

Spring Meeting - Friday March 31, 2000

Joint Symposium: Northeastern Society of Periodontists

and Northeastern Gnathological Society

New York Marriott Marquis Hotel
1535 Broadway
New York, NY

The intricate interrelationship between the fields of periodontics and prosthodontics has long been established. Ample knowledge of each specialty is paramount for the other to attain in order to provide proper treatment planning and patient care. New advances in periodontal regenerative therapy, dental implants, dental materials and laboratory techniques have created a diversified array of treatment modalities that have only been possible within the last few decades. Revisiting old and new techniques in combination with a vast flow of intricate clinical and scientific information is essential for today's clinician. This will help to devise new applications and develop a comprehensive understanding of principles necessary for complex treatment cases.

Once again our next meeting will be a joint collaboration with the Northeastern Gnathological Society. This will be a great opportunity to explore the various multidisciplinary aspects of periodontics and prosthodontics. Joint meetings by their nature require a higher level of planning and logistics. Many have worked hard to organize a premium quality symposium for you. Of those, Program Chairpersons Dr. Luis J. Fujimoto from NESP and Dr. Vincent Celenza from NGS are two who deserve honorable mention for arranging a distinguished list of speakers with exciting topics. Albeit, we can't neglect to mention ever present Dr. David I. Kratenstein whose hard work has helped maintain a smooth sail throughout the meetings.

Dr. Jan T. Lindhe will discuss "Soft Tissue Integration To Titanium Implants". The long term maintenance of uncompromised function of oral endosseous titanium implants seems to be dependent on sustained osseointegration as well as on a properly functioning barrier established at the transmucosal passage of the implant. In experiments from Dr. Lindhe's laboratory (Berglundh et al. 1991, 1992, 1994) it was observed that the transmucosal barrier at "two-stage implants" included one epithelial compartment which was continuous with a zone of connective tissue. The connective tissue which was in close contact with the surface of the implant was rich

in collagen but poor in cells and vascular structures. Plaque accumulation on the abutment challenged the barrier and resulted in the establishment of an infiltrate in the mucosa which may have prevented continuous tissue breakdown. Some characteristics of the peri-implant mucosa at "one-stage implants" (ITI system) was described by Buser et al. (1992). They used undecalcified sections and confirmed that the soft tissue barrier was comprised of an epithelial and a connective tissue component with dimensions in part comparable to those described by Berglundh et al. (1991). Buser et al. (1992) furthermore stated that in the supracrestal area "a direct connective tissue contact to the implant post was observed". This particular portion of the connective tissue "was free of blood vessels and resembled closely an inflammation-free scar tissue formation".

Taken together, the findings reported above may be interpreted to imply that the wound healing that occurs in the mucosa of the alveolar ridge following implant installation is dependent on fixture stability but independent of proper "osseointegration".

Dr. Lindhe has dedicated more than 35 years in periodontal clinical research since he was a graduate student at University of Lund in Sweden. His impressive list of research, publications and contributions to the field of periodontology is well known throughout the world. His early research studied the influence of hormones on gingival tissues. This was followed by a series of classical findings on the role of occlusion in periodontal disease. His next focus was the evaluation of wound healing, inflammatory response to periodontal pathogens, chemotherapeutic intervention, plaque control, new attachment formation, and mechanism of plaque formation. More recently he has provided a valuable body of new findings that help us understand the characteristics and behavior of peri-implant tissues in various clinical situations. Dr. Lindhe took a leave of absence as the Dean of the University of Gothenburg in Sweden to serve as the Dean of School of Dental Medicine at the University of Pennsylvania from 1983-1988. He is presently Professor and Chairman of the Department of Periodontology at the University of Gothenburg and Associate Editor of the Scandinavian Journal of Dental Research. He has received numerous awards and honors, most recently as Fellow of Royal College of Surgeons in Ireland and England. He has served as editor to many prestigious journals and authored several periodontal textbooks. His latest book "Clinical Periodontology and Implant Dentistry" was published in 1997.

Learning Objectives:

To further examine whether the marginal peri-implant tissues at intentionally non-submerged (one-stage implants) and initially submerged and subsequently exposed implants (two-stage implants) differ with respect to morphology and composition of the transmucosal tissue.

Dr. Peter K. Moy will present techniques on "Restoration-Guided Grafting Procedures to Optimize Esthetics and Function of the Implant-Supported Prosthesis". Success of implant-supported restorations is well documented in the scientific literature. Previous concerns for short and long term stability of an implant-supported restoration are now replaced with concerns for the ultimate esthetics that can be achieved with these restorations. Today's implant patients are demanding more natural looking restorations as well. They will not accept the old adage "the

implant(s) had to be placed where the bone was". They are more aware of what the implant treatment option may provide and their expectations are higher in terms of having the restoration look like a real tooth. Establishing the proper ridge contours will permit the final restorations to have proper emergence profiles and ideal esthetics.

Hard tissue grafting of the oral and maxillofacial regions in conjunction with dental implant placement have progressed from the simplified technique of maxillary antral grafting to the more demanding "Site Development" procedures to improve the cosmetics of the final restoration. The implant surgeon must be well versed in all aspects of harvesting hard and soft tissue, as well as the various techniques in using the harvested tissue to correct contour defects. Early presurgical communication with the restorative specialist is critically important to optimize the esthetic results of the final restoration. The use of radiographic and surgical templates are strongly recommended for grafting, as well as implant placement procedures. Techniques of template fabrication, harvesting of tissue, fixation of graft, Stage I and Stage II procedures will be reviewed. The esthetic results that may be achieved with these techniques and how they may enhance the final results will be illustrated.

Dr. Moy received his dental degree from the University of Pittsburgh, a certificate in General Practice Residency from Queen's Medical Center in Honolulu, Hawaii and his certificate in Oral and Maxillofacial Surgery from UCLA Hospital. He presently limits his practice to Oral and Maxillofacial Surgery focusing mainly in the areas of osseointegrated dental implants and reconstruction of severely atrophic ridges. He is currently on staff in the departments of Oral and Maxillofacial Surgery and Hospital Dentistry at UCLA. He is Co-director of the UCLA Dental Implant Center. Dr. Moy has written numerous articles related to Implant Dentistry and Osseointegration, specifically on bone grafting and augmentation procedures for the atrophic ridges. He has lectured nationally and internationally, most recently at the 81st Annual Meeting of the American Association of Oral and Maxillofacial Surgeons. He founded and maintains his private practice in the West Coast Center for Osseointegration, located in Brentwood, California.

Learning Objectives:

- 1) To identify the need and objectives of establishing ideal implant position and angulation.
- 2) To understand the importance of "Team Approach to Implant Dentistry".
- 3) To be able to properly consent the patient for hard and soft tissue grafting procedures.
- 4) To identify the ideal donor sites for the specific grafting techniques.
- 5) To use the appropriate grafting procedure for specific defects.
- 6) To understand risks versus benefits of one-stage or two-stage procedures in site development.

Dr. Gary M. Reiser will present "Surgical Creation of an Optimal Periodontal Environment". He will discuss two types of periodontal surgical cases: soft tissue deficiencies and bone compromised cases. Several categories of restorative outcomes can be greatly enhanced by appropriately treatment planning for cosmetic soft tissue surgical procedures. Crown lengthening, crown shortening, root coverage grafts, ridge augmentation and implant augmentation sites should be evaluated with regard to surgical upgrading prior to completion of restorations. Achieving predictable treatment outcomes requires careful evaluation of

periodontitis-related bone loss. The moderate loss of periodontal support can be predictably corrected by osseous resective and/or guided tissue regeneration procedures. When more severe levels of bone loss are encountered, decisions related to extraction and tooth replacement come into play. In such cases fixed partial dentures or implant supported restorations with or without guided bone regeneration to restore lost bone must be considered. Multiple case categories will be presented and discussed.

Dr. Reiser has been a very active participant in the periodontal community. He has served in various capacities and currently is the Director of American Board of Periodontology. He served as the Trustee to the American Academy of Periodontology from 1995 to 1999. He was Chairman of the Dental Care Committee, member of Long Range Planning and Continuing Education Oversight Committees of AAP. Dr. Reiser has a private practice in periodontology and implantology in Swampscott, MA, and is an active member of the Dental Surgery Departments at Beth Israel Hospital in Boston and Atlanticare Medical Center in Lynn, MA.

Learning Objectives:

Surgical management of soft tissue and osseous topography in various stages of periodontitis with proper treatment planning to achieve desirable esthetic outcome in conjunction with restorative therapy.

Dr. Peter S. Wohrle will present "The Synergy of Surgery and Prosthetics". The ultimate goal of restorative dentistry is to provide patients with restorations that mimic natural dentition. His presentation will focus on principles to rehabilitate the patient with implant supported restoration to proper form, function and esthetics. Emphasis will be placed on optimal implant placement in four dimensions to achieve the ideal emergence profile together with newly developed techniques that allow for the development of harmony, symmetry, and continuity of form for implant supported restorations.

Dr. Wohrle completed a four-year certified dental technician program in Switzerland. Subsequently, he entered Harvard University where he received his dental degree cum laude, completed the Advanced Education Program in Prosthodontics followed by the Advanced Education Program in Implant Dentistry, and received a Master of Medical Sciences degree. Dr. Wohrle's practice in Newport Beach, California is limited to implant dentistry and prosthodontics. He is one of the few dentists worldwide with formal training in the interrelated areas of implant surgery, implant prosthodontics and implant laboratory technology.

Learning Objectives:

To bring together the interrelationship of surgical and prosthetic phases of implant restorations to achieve the ultimate result of mimicking nature in the best possible manner.

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