surrounding the single implant restoration. This approach has successfully been used in periodontally compromised sockets thus immediately transforming the periodontal tissues into healthy periimplant tissues (Tripodakis 2001, 2002). The positive results have also been confirmed microbiologically (Tripodakis & Nakou 2004).

The aim: Of the present retrospective study is the volumetric tomographic evaluation of the relationship between the crestal bone surrounding the implant and the overlying soft tissue profile five years postoperatively.

Material and methods: Thirty anterior teeth and first premolars severally periodontally involved (class II or III osseous defects), in healthy individuals, non smokers, successfully restored with implant restorations by the above mentioned surgical protocol were clinically evaluated at least five years postoperatively. Three-dimensional volumetric analysis was accomplished by the Morita Accuitomo tomographic system, after covering the labial surface of the clinical crown of the restoration and the surrounding soft tissues with radiopaque tin foil (Dry foil, Jelenco USA). Sagital and coronal slices were made parallel to the long central axis of the implant and measurements of the distance of the soft tissue margin to the crestal bone level and the implant-abutment interface were performed. Thus the height of the unsupported by bone soft tissue adaptation around the abutment was assessed.

Conclusion: The soft tissue height above the bone level was found to be equal or greater than 4 mm labialy. It was therefore exceeding the 3 accordingly found in the normal natural dentition or implant restorations after wound healing of an open flap surgical approach.

322 Topic Long-Term Studies

Long term follow-up of 1626 dental implants at a periodontal private practice

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Private Practice, Kfar Saba

Advanced periodontal disease is characterized by loss of hard and soft tissues which leads to loss of periodontal attachment. Dental implants are widely used today for restoring missing teeth while the scientific literature support this trend with very high percentage of survival and success rates. But the information and knowledge about using dental implants in periodontal patients especially for the long run is very limited.

I would like to present a study of more than 10 years follow-up of 1626 dental implants inserted to 475 patients. 311 patients with 1171 were treated for moderate, severe and aggressive periodontal diseases. 77 implants in 58 patients were lost during the study. While the failure rate in the periodontally compromised group was 5.2% (61implants in 43 patients) the failure rate at the periodontally healthy patients was 1.36%.

More data and statistics of implants survival will be presented for smoking, diabetics and non-maintained sub-populations.

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A five-year evaluation of Straumann implants: results from private practice

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Objectives: The aim of this study was to determine the five to six-year survival and success rates of 528 Straumann implants placed between 1995 and 2000 in a private practice. Success rate was evaluated from radiographs.

Material and methods: 528 implants were placed with no exclusion criteria. Of the sample size 47.3% were equal to or shorter than 10 mm in length. All available patients were contacted after five to six-years for intraoral radiographs and crestal bone loss (CBL) measurements were made. The baseline reference was identified as the interface between the rough-smooth surface. Various parameters were investigated for their influence on CBL. Statistics included ANOVA regression analysis and Pearson Chi square test.

Results: Radiographs of 411(77.8%) implants qualified for analysis. The overall survival and success rates were 99.2% and 93% respectively. CBL was 1.16 ± 1.03 mm (range 0-5.41 mm). Four factors influenced CBL (p < 0.001): Implant surface texture (TPS > SLA), smoking status (smoking > non-smoking), implant location (anterior > posterior), and vestibular bone lamella width at surgery (VBL) (VBL < 1 mm showed greater bone loss than VBL > 1 mm). Other factors such as the diameter of the implant or the type of suprastructure did not have a significant effect. Short implants showed a limited bone loss, with no significant difference when compared to longer ones (p > 0.05).

Conclusions: The success and survival rates presented hereby from a private practice compared well with related previous studies. TPS-surfaced implants, anterior arch location, smokers and VBL < 1 mm were parameters which significantly increased CBL. Moreover, short implants can be considered as a long term reliable treatment option.

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A retrospective evaluation of implant installation with maxillary sinus augmentation by lateral window technique

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Purpose: The aim of this study was to evaluate the clinical results of implants which were installed with maxillary sinus elevation by using lateral window technique.

Material and methods: We performed the maxillary sinus elevation by lateral window technique to 87 patients who visited Department of Oral & Maxillofacial Surgery, Chonnam National University Hospital from January, 2003 to January, 2007. The mean follow-up period was 28.5 months.