

- ② immediate implantation and immediate loading.
- ③ implantation with simultaneous bone regeneration procedure.
- ④ soft tissue management for esthetics.(guided soft tissue healing)

OV-5

Clinical Evaluation of Magnet with Milled Bar for Implant-supported Overdenture

Jen-Chyan Wang*, J. M. Hong, Y. M. Wu, C. H. Cheng

Department of Prosthodontics, School of Dentistry, Kaohsiung Medical College, Taiwan

This report describes a technique of combining magnetic attachment with milling bar for implant-supported overdenture and evaluates the clinical performance of such design used in 30 patients between 12 to 48 months period. Two types of rare earth magnet systems, Magfit EX600, Aichi steel works Ltd. Japan and Hicorex super, Hitachi metal Corp., Japan, were used in this project. During prosthetic fabrication phase, the keepers of magnetic attachments were embedded in wax pattern and cast on the occlusal surface of metal bar with Pd-Ag alloy. The keepers were placed in between implant abutments and/or on the cantilevered portion of cast bar. The cast metal bar was then machine-milled for guiding denture insert: on and increasing stability.

A total of 112 magnets were combined with milling bars for 31 implant-including peri-implant soft tissue health, corrosion resistance of magnetic attachment, and the degree of patients' satisfaction for denture clinical performance. The results indicate none of the 125 implants (IMZ 92, Branemark 15, and 3i 8) support overdentures was failed during 12 to 48 months functional period. There were only few soft tissue problems around implant-abutment areas after prosthetic treatment. No corrosion of magnetic attachments was found. From subjective questionnaire evaluation, the majority of the 30 patients were satisfied with the retention and stability of their implant-supported overdentures. Based on the limited clinical observation, we conclude that combining magnetic attachments with cast milled bar for implant-supported overdenture can be used successfully for fully edentulous patients over a medium-term period.

Oral

OV-6

Implant Supported Prosthodontic Restoration In severely Atrophied Posterior Mandible using Distraction Osteogenesis

Yong-Chang Choi*, M. K. Choi

Department of Prosthodontics and Implant Dentistry, Catholic University, Seoul, Korea

Implant assisted dental restorations have been recognized as predictable prosthodontics treatment modality with excellent long-term prognosis. The survival rate of implants and the implant prosthesis in fully and partially edentulism case are 91%~99% in the mandible, 85%~95% in the maxilla in area 10 years. However, failures also have been reported. The most common reasons of failures are due to the improper low bone density, the inadequate bone quantity, infection, overloads etc. Especially in lower posterior mandibular regions, often encountered with severely atrophied alveolar ridges. In such cases, onlay procedures, inferior alveolar nerve lateral reposition procedures or short implants placement were inevitable to