

All patients rated with the aid of questionnaires their general satisfaction as well as other features of their dentures (comfort, stability, ability of chewing, speech, esthetic and cleaning ability) prior to the treatment and at 6 and 12 months.

Results: All the groups had less oral health related quality of life problems than before treatment. L-group gave higher rating on comfort, stability and ability to chew, B-group had higher rating on maintenance requirement comparing with the other groups.

Conclusions: Rehabilitation with implants produces a significant improvement in the satisfaction level and the masticatory capacity, despite the fact that the retention force of the magnet attachment is smaller.

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A five-year study of short Straumann implants supporting fixed rehabilitations

Nedir R¹, Nurdin N¹, Gheddaf Dam H², Abi Najm S³, Bischof M⁴

¹Ardentis Clinique Dentaire Vevey, Swiss Dental Clinics Group, Vevey, ²Harvard School of Dental Medicine, Boston, ³Ardentis Clinique Dentaire Lausanne, Swiss Dental Clinics Group, Lausanne, ⁴Department of Stomatology and Oral Surgery, Section of Dental Medicine, University of Geneva, Geneva

Objectives: The aim of this five-year study was to evaluate radiographic crestal bone loss (CBL) on short implants supporting fixed rehabilitations and to analyze the bone level versus crown-to-implant length (C/L) ratio.

Material and methods: 250 Straumann implants with mean length of 9.2 mm were placed in 135 patients to rehabilitate 163 mandibular and 87 maxillary sites. 95.2% of them were located in the posterior area. Fixed prosthetic restorations included 103 single crowns, 81 fixed partial dentures (FPDs). Using the rough-smooth implant interface as reference level, CBL was measured on the five-to-six year radiographs. Non parametric Wilcoxon's and Kruskal-Wallis tests were used for group comparisons.

Results: Fifty-two implants (20.8%) were considered dropped out. The overall survival rate was 99.5%; 11 implants showed CBL higher than 3 mm, bringing thus the success rate to 93.9%. The mean CBL was 0.93 ± 1.08 mm. The mean C/L ratio was 1.3 ± 0.3 . CBL was 0.93 ± 1.09 mm for $0 < C/L < 1$ (22 implants), 0.86 ± 1.04 mm for $1 < C/L < 1.5$ (133 implants), 1.14 ± 0.92 mm for $1.5 < C/L$ (43 implants). Differences in CBLs between the C/L groups were not statistically significant ($p = 0.441$). Implants supporting single crowns showed a CBL of 0.79 ± 0.98 mm whereas a CBL of 1.01 ± 1.02 mm was measured for those supporting FPDs. The difference between the CBLs for these two prosthetic groups were statistically significant ($p < 0.05$).

Conclusion: The C/L ratio did not influence CBL around implants. Unfavourable C/L ratio generated by the use of short implants did not depreciate the success rate. Restorations with

single crowns did not display higher risks of CBL increase than splinted ones.

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Use of short implants in single tooth replacement (follow-up 1-year)

Rossi F¹, Botticelli D², Ricci E³, Marchetti C⁴

¹University of Bologna, Bologna, ²Director of Ariminum Research & Dental Education Center, Rimini, ³University of Bologna, Bologna, ⁴Director of Department of Maxillofacial Surgery, S. Orsola Hospital, Bologna

Objectives: The placement of endosseous implants in posterior sites represents a big challenge, particularly when the alveolar bone height is reduced. Bone stress due to implant loading seems to be independent of implant length. So it is not necessary to use long implants to have good results. Moreover the use of short implants could avoid the patient to undergo major oral surgery where the bone height is limited. The aim of this study is to evaluate the clinical outcome and survival rate, 1-year after loading, of 6 mm long implants used in the posterior regions.

Material and methods: forty-one SLActive Straumann[®] short implants, 6 mm long, were placed in 36 patients. Nineteen implants were 4.1 mm in diameter (regular neck), and twenty-two were 4.8 mm in diameter (wide neck). Implants were placed in premolars (14 implants: 34.1%) and molars region (27 implants: 65.9%), both in the mandible (25 implants: 60.9%) and in the maxilla (16 implants: 39.1%). Implants were loaded after 6 weeks.

Results: Two of 41 placed short implants were lost before loading. The overall survival rate was 95.1%. At the time of implant installation, bone quality 2 and 3 (Lekholm-Zarb classification, 1985) was found in 78% of the treated sites; the mean crown-implant ratio was 1.2.

Conclusion: This study showed a high success rate of 6 mm long implants used in the treatment of partial edentulism, in bone of good quality, at 1 year of follow up after loading in single tooth replacement in posterior sites.

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Maxillary implants with early loading – long-term results

Mertens C, Steveling H

Department of Oral and Maxillofacial Surgery, University Heidelberg, Heidelberg

Objective: Because of the specific maxillary bone quality, literature used to recommend a 6 months healing period for implants in the upper jaw. The purpose of this clinical study was to evaluate, if maxillary implants loaded after 3 months show lower success rates and more marginal bone loss than respective implants with a healing period of 6 months. Patients were followed up for 8 years.

Material and methods: Prior to implant surgery, patients were divided into two groups. In group A fifteen patients received 37