Assessment of Patient Satisfaction with Regard to Immediately Loaded Bar-splinted Implants in the Edentulous Mandible


Introduction
The clinically and statistically proven treatment concept of four immediately loaded bar-supported implants in the symphysis region, described by P.D. Ledermann in 1979 (1) is considered to be the ‘golden standard’ for an accelerated implant-supported treatment. This time- and cost-effective technique offers an excellent opportunity for the treatment of elderly patients (2). In addition, the patient’s satisfaction with the final result plays a significant role for the acceptance of this method. The patient satisfaction before and after treatment was evaluated and compared in a survey. The dentist’s and dental technician’s data were added to the subjectively assessed results.

Material and Method
A total of 160 transgingival cylindrical implants (FRIALOC Implants, FRIADENT GmbH, Germany) were placed in 40 patients between 1999 and 2001. The mean age of the patients was 71 years, of which 54% females and 46% males. For subsequent individual assessment of the test patients, the practitioner evaluated and documented the hygiene status before starting the implant therapy. Assessment was performed based on standard indices: gingival index, plaque index (in case of residual teeth) (3); (4), hygiene status of the existing prosthesis. In addition, the status of the peri-implantological site and anamnestic peculiarities were evaluated and documented by the dental specialist. During implant placement, the diameter, length and location of every implant were noted down. The bone quality was also documented. Primary stability was measured during surgery. After fabrication of the bar construction in the lab, the passive fit was checked and evaluated chairside. The assisting lab technician made the respective adjustments of the bar on the model. Three months post-op the patients were asked to evaluate the new implant-supported prosthesis compared to the old conventional prosthesis. The questions related to the overall tooth/label situation, but also on evaluating the new versus the old restoration. The test persons estimated their general satisfaction with the prosthetic restoration, esthetics, wearing comfort, functionality with regard to speech and mastication, how often they wear their overdenture per day. Other questions referred to the effect on social life. Finally, they provided information on whether they would decide once again for implant treatment and recommend it to friends or third persons.

Summary
The stability of a mandibular overdenture by four bar-splinted and immediately loaded symphyseal implants is a treatment concept positively evaluated by most of the patients. All patients were significantly more satisfied with their new implant-supported restoration due to improved function, comfort and esthetics. The data of the practitioner and lab technician correlate with the patient’s positive assessment. They specifically emphasized the positive cost-to-benefit ratio. The favourable evaluation of functionality and esthetics of the restoration are the decisive factors for the patient’s long-term satisfaction. The patient can re-gain quality of life with a simple technique. The further development of the FRIALOC concept (FRIADENT GmbH, Mannheim) has been continued and the indications expanded. Handling was improved and primary stability consistently optimized, which resulted in the introduction of the XIVE/TG implant system (FRIADENT GmbH, Mannheim). The increased number of prosthetic components provides a complete implant system for all therapeutic requirements.

References

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Author’s address: Dr. R. Jansen, Kastanienweg 45 D-68723 Schwalbach