

23. PARTICULARITIES OF ALTERNATIVE METHODS OF IMPLANTS PLACEMENT USING ALL-ON-4 AND ALL-ON-6 CONCEPT

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Introduction. Total edentulism remains an important challenge in oral implantology due to the consequences of teeth extractions which lead to bone and mucosa atrophy, sinus pneumatization and others. All these aspects create difficulties for implant-prosthetic rehabilitation because of the increased number of surgeries and terms. The development of alternative methods based on the All-on-six/four concept allow the specialist to restore the integrity of dental arches in short terms, with a less invasive approach.

Aim of study. Evaluation of the particularities of the implant-prosthetic rehabilitation of the patients by the All 4 and All 6 technique.

Methods and materials. The study was based on 18 patients, 5 men and 13 women aged between 40 and 72 years (mean age $57,36 \pm 6,52$ SD) rehabilitated using All-on-6/4 methods. Six patients had complete edentulism (4 in maxilla and 2 in the mandible) while 12 patients had partial edentulism (3 at the level of maxilla, 4 in the region of mandible, and 5 at both jaws) and periodontal compromised teeth. All the patients were clinically and paraclinical (CBCT) examined, and the treatment plan was performed. The following parameters were analyzed: length of the lip, smile line, position of the future incisal margin, prosthetic space, prosthesis angulation upon the alveolar ridge, bone density, number of implants and angulation, type of antagonists, necessity of bone reduction, surgical results related to the preoperative plan, bone evolution and complications during integration period. A total of 109 implants were installed (diameter of 4mm and higher and 8 to 14mm length).

Results. After evaluation of the treated cases, the most important role was played by the preoperative planning (esthetical, functional, and surgical aspects). The necessity of bone reduction influenced both esthetical results and implants length, angulation and distribution. The drilling protocol was correlated to bone density (32 implants inserted using under-preparation) to achieve a minimum of 35-40 Ncm, especially in the posterior tilted implants. The risk related to the primary stability of implants and bone density was higher in those patients who had stable and fixed antagonists. At 9 implants, due to the lack of stability, a deviation from initial plan was made by increasing the implant diameter and their angulation. In 4 cases, bone fenestration was made in tilted implants due to the curvature of the mandible. To minimize the loading risk, all the restorations were made with a metallic frame. At 6 months postoperative, in patients with poor hygiene, peri-implant bone loss was bigger than expected and implant platforms were slightly above the bone at 6 months post-prosthetic (in 8 implants). The prosthetic complications were present in 2 cases (composite fractures at the level of cantilevers).

Conclusion. The implant-prosthetic rehabilitation using All-on-6/4 concept led to good results in short terms and with minimal trauma. However, there are a lot of factors that may influence the success of such rehabilitations at the level of planning, surgery, and prosthetics. A significant disadvantage is the dependence of all the structures from each implant. Since these rehabilitations often include bone reduction and artificial gum and teeth, such procedures should be chosen as the last option, and not the main one.