

DIGITAL PLANNING TECHNIQUES AND PRO-IMPLANTATION PREPARATIONS IN THE CURRENT MANAGEMENT OF ORAL IMPLANTOLOGY

Digital planning techniques can assist the implantologists and oral surgeons in the preparation of the pro-implant and pro-prosthetic stage for patient candidate to implant-prosthetic therapy. Various planning software such (Planmeca Romexis, OneDemand, DDS) are at disposal of the practitioners for measurements of the implant site dimensional parameters (height, width, bone density), localization of risk areas (maxillary sinus, mandibular alveolar nerve), or virtual positioning of implants. The use of digital tools, especially in posterior areas, can increase the clinical performance and patient satisfaction following the implant-prosthetic therapy. Patients with severe maxillary and mandibular alveolar bone atrophy require rehabilitation of the mucosseous support in order to improve the clinical and biological indices of the prosthetic field. The oral surgeon must select proper technique and graft materials in relation to the alveolar bone defect extension and morphology as well as with systemic and loco-regional factors. In the pro-implantation stage various bone addition techniques can be used such from horizontal and vertical augmentation or inlay/onlay bone blocks to complex guided tissue regeneration techniques. In the posterior maxillary areas these techniques can be combined with sinus lifting. Success rate of the alveolar bone grafting techniques and long-term outcome of the implant-prosthetic therapy in grafted implant sites depends mostly by systemic status, clinician experience, follow-up duration, as well as compliance of patients to maintenance sessions