

Autogenous Bone Augmentation In Oral Implantology

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To satisfy the ideal goals of implant dentistry, the hard tissue need to present ideal volumes and quality.

The alveolar process is affected so often after tooth loss that augmentation is usually indicated to achieve optimum result, especially in the esthetic zones.

Augmentation is also required relative to functional conditions of the implant treatment plan, because a reduction of stress at the crestal bone region and a greater resistance to screw loosening and fatigue fracture occurs with larger-diameter implants.

Therefore an improved understanding of biomechanical requirements for long-term prosthesis survival and the increasing use of implants in esthetic restorations often require ridge reconstruction before implant placement for complete or partially edentulous patients. This is especially true in the surgical placement of maxillary anterior implants which is usually critical for ideal esthetics, phonetics, and function. As a result, treatment methods to improve the recipient bone dimensions to optimize success should be considered, especially in the premaxilla.

If inadequate bone exist, several surgical techniques may be used to reconstruct the deficient ridge for implant placement. The number of key factors present and the geometry of a bony defect are important consideration in the selection of a modality for ridge augmentation.

The fewer the number of remaining bony walls, the greater the need for osteopromotive techniques.

Although allografts and guided bone regeneration techniques have been used predictably, these methods have limitations and have been found to produce less favorable results in the treatment larger bone deficiencies.

Autologous cortical/ trabecular bone grafts may be considered the gold standard in the repair of moderate to severe alveolar atrophy and bone defects.

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