

MAXIMIZING AESTHETICS IN THE DEFICIENT ALVEOLAR RIDGE: A CASE REPORT

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Objectives: Hard tissue defects resulting from trauma, infection, or tooth loss often lead to an unfavorable anatomy of maxillary and mandibular alveolar processes that become not suitable for implant therapy without bone grafting. The goal of pre-implant bone augmentation of the deficient alveolar ridge is reconstruction of the proper alveolar anatomy through the techniques of socket preservation, horizontal and vertical ridge augmentation, sinus bone grafting, and others.

Material and methods: In a 37 years old male patient, the implant site was evaluated with CBCT (Cone Beam Computed Tomography) after the cyst removal. The bone volume was found to be insufficient vertically and horizontally according to the CBCT. An autogenous bone graft from the mandibular ramus was harvested and following four months of consolidation an implant (Camlog® screw-line implants, Biotechnologies, Basel, Switzerland) was inserted. After healing period (4 months), a screw retained provisional restoration was fabricated with using the temporary abutments for soft tissue remodeling. All-ceramic crown was fabricated with using ceramic abutment (CAMLOG® Tube-in-Tube Connection) after three weeks. Then, light-curing composite was applied to the cervical part of crown for reproduction of gingiva by means of multiple layering technique.

Results: After the prosthodontic treatment, the patient was recalled at the 6th month and 1st year. The patient satisfaction was high at 1-year evaluation. In this case there was no complications after the augmentation process and implant placement.

Conclusion: As a result, autogenous bone graft and implants provide satisfactory and successful results in the aesthetic zone.

