¡mentation of Complicated Alveolar Defect

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Abstract

Autogenous bone is still believed to be the most effective grafting material for reconstruction of the complicated jaw bone defects. The purpose of this retrospective study is to address the technique of autogenous iliac bone block to rebuild complicated alveolar defects, thereby facilitates subsequent dental implant supported restorations. 28 consecutive iliac ñJ-bone blockò procedures from 2006 through 2011 were enrolled for data analysis. Patients aged from 19-68 years . All of the reconstruction materials were harvested from the superior and medial aspects of the anterior iliac crest. Each and every iliac bone block was tailored to be passively fitting the contour of the alveolar defect and secured in position by titanium mini-screws to achieve significant bone volume expansion in both transverse and vertical dimensions. Pre- and postoperative CT image studies with radiographic guide in position were also conducted to evaluate the shape and volume change of the recipient sites. All iliac bone grafts healed uneventfully with minimal volume shrinkage and unremarkable donor site morbidity. By now, thereôre 77 dental implants survived well in 19 of our patients. The promising results have shown to us that iliac cortico-cancellous bone blocks are very easy to be manipulated by hand instruments and transformed into a ñJ-blockò which not only leads to excellent quantity and quality of bone augmentation but also allows ideal implant positioning with proper axial alignment. With all these advantages, iliac ñJ-bone blockò would no doubt give rise to a higher success rate of complicated implant restorations.