Osteotome Sinus Augmentation with Less Than 5 mm of Native Bone: A Membrane Visualization Technique Using a Tapered Platform-Switching Implant

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As the usage of implants has increased, a trend in dental implantology is a move towards minimally invasive surgical techniques, which offer the advantages of both decreased healing time and lessened surgical morbidity. These improved procedures encourage more patients to consider this treatment. In addition, improved bone-grafting augmentation materials and enhanced implant surface design characteristics have resulted in reduced healing times. The authors describe and discuss the advantages of a modification to the classic osteotome sinus augmentation procedure. This technique, which requires less than 5 mm of native bone, uses demineralized freeze-dried bone allograft (DFDBA) and calcium sulfate (BONDBONE®) as part of a composite graft, along with a tapered platform-switching implant. Cone-beam computed tomography (CBCT) scans are also presented for diagnosis and evaluation after treatment of this minimally invasive technique yielding significant bone augmentation.

**Summary.**

Abstract

As the usage of implants has increased, a trend in dental implantology is a move towards minimally invasive surgical techniques, which offer the advantages of both decreased healing time and lessened surgical morbidity. These improved procedures encourage more patients to consider this treatment. In addition, improved bone-grafting augmentation materials and enhanced implant surface design characteristics have resulted in reduced healing times. The authors describe and discuss the advantages of a modification to the classic osteotome sinus augmentation procedure. This technique, which requires less than 5 mm of native bone, uses demineralized freeze-dried bone allograft (DFDBA) and calcium sulfate (BONDBONE®) as part of a composite graft, along with a tapered platform-switching implant. Cone-beam computed tomography (CBCT) scans are also presented for diagnosis and evaluation after treatment of this minimally invasive technique yielding significant bone augmentation.