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POSTER ***Case Reports***

Conservative Sinus Floor Elevation and Transport of Putty Graft by Osseodensification Drills: Two Cases

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Abstract

Introduction: Sufficient bone quality and sufficient amount of bone surrounding implants is mandatory for having long-term satisfactory treatment outcome. Especially in the posterior maxilla pneumatization of maxillary sinus and resorption of alveolar bone after tooth loss often compromises dental implant therapy. A bone drilling concept, named osseodensification (OD), has been introduced and this concept has been proposed to help in better osteotomy preparation, bone densification, indirect sinus lift and also achieve bone expansion.

Case Reports: Here we aimed to present two cases that sinus floor elevation (SFE) has successfully achieved by OD concept and putty graft sent by drills for sinus augmentation. Primer stability of the implants were good, sinus membranes were intact and dome-shaped augmentation area has observed radiographically for both cases.

Discussion: Lateral and crestal approach are the main techniques for SFE. Although these procedures has been proven to be predictable with high success rate, various complications as membrane perforation, bleeding etc. have been reported. These complications cause longer operation times and can lead additional complications such as reduction of blood supply, displacement of the graft, compromised graft integration and wound healing. Benign paroxysmal positional vertigo is another rare but uncomfortable complication occurring following osteotome SFE.

Conclusion: Considering the complications of the conventional methods, this new concept can give successful results in SFE with a more conservative and simple approach. Moreover, it is seen as a significant advantage that better primary stability in the maxilla posterior region, where bone quality is generally low.