

PC-I-18. Dental implants placement after maxillary sinus floor augmentation with anorganic bovine bone and autogenous bone

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Background

Insertion of dental implants in the atrophic maxilla is complicated because of lack of supporting bone. Augmentation of the maxillary sinus floor with autogenous bone graft has been proven to be a reliable treatment modality. The purpose of this study was to evaluate the clinical success of dental implants placed in maxillary sinuses augmented with anorganic bovine bone and autogenous bone.

Material and methods

In 48 consecutive patients, 65 maxillary sinuses were augmented with mixture of a 1: 4 autogenous bone/bovine hydroxyapatite(Bio-Oss) mixed with platelet rich plasma. 138 implants were placed on 7 months after sinus grafting. Loading of implants was allowed following an average time of 6.1 months. The follow time was 10-32months after implant placement. The survival rate of implants and percentage of sinus membrane perforation were evaluation.

Results

During the augmentaion procedure, 18 perforations of the Schneiderian membrane were observed with a perforation rate 27.7%(18 perforations/ 65 treated sites). Symptoms sinusitis were observed in 9 patients and successfully treated with antibiotics. 19 of 138 inserted implants in 10 patients were lost during the follow-up (12 before loading and 7 after functional loading), for survival rate 86.3%.

Conclusions

Acceptable short-time results can be obtained with implants placed after maxillary sinus floor augmentation.