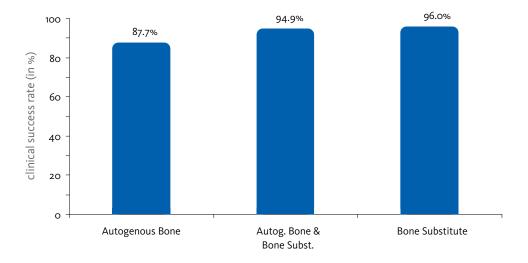
Better clinical success rate with bone substitute

Excerpt from Del Fabbro M., Testori T., Francetti L., Weinstein R. Systematic Review of Survival Rates for Implants Placed in the Grafted Maxillary Sinus. Int. J. Periodontics Restorative Dent. 2004; 24(6): 565-77.

Results

The clinical success rate is significantly higher for sinus floor augmentation when bone substitutes are used for bone augmentation than with autogenous bone only. No significant difference was found when comparing application of bone substitute alone or in combination with autogenous bone.



Conclusion

- Grafting of autogenous bone for sinus floor augmentation with the lateral window technique is not necessary.
- The use of bone substitutes increases the clinical success rate either in combination with autogenous bone or alone.
- The high rate of resorption of autogenous bone can be considered as the main reason for a reduced implant survival rate.
- Addition of Geistlich Bio-Oss® or even the application of Geistlich Bio-Oss® alone in sinus floor augmentation leads to excellent long-term clinical results and very good osseintegration of implants (Valentini et al. 2003, Hallman et al. 2003).

The Study

39 studies with 6913 implants were included in this analysis

Selection of the clinical studies for literature analysis published from 1986-2002

- 2 different international literature data bases
- In addition search in 3 important journals in implantology

Criteria for the selection

- Clinical studies regarding sinus floor augmentation with at least 20 cases
- Lateral window technique
- Follow-up at least 1 year after implant loading
- Implant survival rate was determined





Order

□ Please provide me with an example of the study	
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Systematic Review of Survival Rates for Implants Placed in the Grafted Maxillary Sinus

Del Fabbro M., Testori T., Francetti L., Weinstein R. Systematic Review of Survival Rates for Implants Placed in the Grafted Maxillary Sinus. Int. J. Periodontics Restorative Dent. 2004; 24(6): 565-77.

Abstract

Based on a systematic review of the literature from 1986 to 2002, this study sought to determine the survival rate of root-form dental implants placed in the grafted maxillary sinus. Secondary goals were to determine the effects of graft material, implant surface characteristics, and simultaneous versus delayed placement on survival rate. A search of the main electronic databases was performed in addition to a hand search of the most relevant journals. All relevant articles were screened according to specific inclusion criteria. Selected papers were reviewed for data extraction. The search yielded 252 articles applicable to sinus grafts associated with implant treatment. Of these, 39 met the inclusion criteria for qualitative data analysis. Only 3 of the articles were randomized controlled trials. The overall implant survival rate for the 39 included studies was 91.49%. The database included 6,913 implants placed in 2,046 subjects with loaded follow-up time ranging from 12 to 75 months. Implant survival was 87.70% with grafts of 100% autogenous bone, 94.88% when combining autogenous bone with various bone substitutes, and 95.98% with bone grafts consisting of bone substitutes alone. The survival rate for implants having smooth and rough surfaces was 85.64% and 95.98%, respectively. Simultaneous and delayed procedures displayed similar survival rates of 92.17% and 92.93%, respectively. When implants are placed in grafted maxillary sinuses, the performance of rough implants are placed in grafted maxillary sinuses, the performance of rough implants are as effective as autogenous bone when used alone or in combination with autogenous bone. Studies using a split-mouth design with one variable are needed to further validate the findings.