

Minimally invasive approach to implant treatment in the posterior maxilla

Re-evaluating sinus lifting as first choice

GABOR TEPPER MD, DMD, PHD, CHRISTIAN JARRY DDS, MS, PHD

Literature

1. Moreno Vazquez JC, Gonzalez de Rivera AS, Gil HS, et al: Complication rate in 200 consecutive sinus lift procedures: Guidelines for prevention and treatment. *J Oral Maxillofac Surg* 72:892,2014
2. Watzek G, Weber R, Bernhart T, et al: Treatment of patients with extreme maxillary atrophy using sinus floor augmentation and implants: Preliminary results. *Int J Oral Maxillofac Surg* 27:428, 1998
3. Pjetursson BE, Tan WC, Zwahlen M, Lang NP: A systematic review of the success of sinus floor elevation and survival of implants inserted in combination with sinus floor elevation. *J Clin Periodontol* 35(8 suppl):216, 2008
4. Chiapasco M, Zaniboni M: Methods to treat the edentulous posterior maxilla: Implants with sinus grafting. *J Oral Maxillofac Surg* 67:867, 2009
5. Wen S-C, Lin Y-H, Yang Y-C, Wang H-L: The influence of sinus membrane thickness upon membrane perforation during transcrestal sinus lift procedure [published online ahead of print May 29, 2014]. *Clin Oral Implants Res*. <http://dx.doi.org/10.1111/clr.12429>.
6. Pommer B, Unger E, S€ut€o D, et al: Mechanical properties of the Schneiderian membrane in vitro. *Clin Oral Implants Res* 20:633, 2009
7. Zijdeveld SA, van den Bergh JP, Schulten EA, ten Bruggenkate CM: Anatomical and surgical findings and complications in 100 consecutive maxillary sinus floor elevation procedures. *J Oral Maxillofac Surg* 66:1426, 2008
8. Esposito M, Grusovin MG, Rees J, Karasoulos D, Felice P, Alissa R, Worthington H, Coulthard P. Effectiveness of sinus lift procedures for dental implant rehabilitation: a Cochrane systematic review. *Eur J Oral Implantol*. 2010 Spring;3(1):7-26. PMID: 20467595.
9. Lin WS, Eckert SE. Clinical performance of intentionally tilted implants versus axially positioned implants: A systematic review. *Clin Oral Implants Res*. 2018 Oct;29 Suppl 16:78-105. doi: 10.1111/clr.13294. PMID: 30328193.
10. Atieh MA, Zadeh H, Stanford CM, Cooper LF. Survival of short dental implants for treatment of posterior partial edentulism: a systematic review. *Int J Oral Maxillofac Implants*. 2012 Nov-Dec;27(6):1323-31. PMID: 23189281.
11. Guljé FL, Raghoebar GM, Vissink A, Meijer HJA. Single crown restorations supported by 6-mm implants in the resorbed posterior mandible: A five-year prospective case series. *Clin Implant Dent Relat Res*. 2019 Oct;21(5):1017-1022. doi: 10.1111/cid.12825. Epub 2019 Jul 28. PMID: 31353837; PMCID: PMC6899810.
12. Thoma DS, Zeltner M, Hüsler J, Hämmerle CH, Jung RE. EAO Supplement Working Group 4 - EAO CC 2015 Short implants versus sinus lifting with longer implants to restore the posterior maxilla: a systematic review. *Clin Oral Implants Res*. 2015 Sep;26 Suppl 11:154-69. doi: 10.1111/clr.12615. Epub 2015 May 21. PMID: 25997901.
13. Nolan, P.J., Freeman, K. and Kraut, R.A. (2014) Correlation between Schneiderian Membrane Perforation and Sinus Lift Graft Outcome: A Retrospective Evaluation of 359 Augmented Sinus. *Journal of Oral and Maxillofacial Surgery*, 72, 47-52.