

44. Indirect sinus lift of atrophic posterior maxilla using osseodensification: a case report

Umesh Yeshwanth Pai

Manipal College of Dental Sciences, Mangalore

Primary stability in implant placement is one of the most critical factors determining the outcome of implant therapy. The factors mainly involved in enhancing implant primary stability are bone density, surgical protocol, and implant thread type, and geometry. The mechanical friction between implant surface and bone walls of the osteotomy site provides primary implant stability. The insertion torque peak was demonstrated to be directly related to implant primary stability and host bone density⁵; high insertion torque could significantly increase the initial bone-to-implant contact percentage (%bic) with respect to implant inserted with low insertion torque values. Osseodensification is a novel biomechanical bone preparation performed for dental implant placement. It causes low plastic deformation of bone created by rolling and sliding contact with a densifying bur that is fluted to densify the bone as it drills with minimal heat elevation. Osseodensification (od), a bone nonextraction technique, was developed by huwais in 2013⁸ and made possible with specially designed burs (densahtmburs) to increase bone density as they expand an osteotomy. The new burs allow bone preservation and condensation through compaction autografting during osteotomy preparation, increasing the periimplant bone density. This paper describes a case of indirect sinus lift with compaction autografting done in posterior maxilla along with simultaneous implant placement.

DOI: 10.4103/0972-4052.246620