Implant dentistry in posterior maxilla has often been a challenge due to pneumatized sinus. Bone grafting in sinus cavity is known to be very predictable with good long-term success.

There have been several surgical techniques suggested for sinus lift such as lateral window (Caldwell Luc), osteotome (Summer’s) technique, Hydrolic sinus lift, etc. However, lateral window technique is somewhat invasive with many complications and post-operative pain involved. In contrast, Summer’s and Hydrolic Sinus procedures are less invasive, but more technique sensitive.

This author developed a very simple and predictable way to lift Schneiderian membrane and at the same time collect autogenous bone. This procedure can be done with or without flap with minimal post-operative pain involved. The author named the procedure “The WaterLESS technique” and was awarded the table clinic award at 2007 American Academy of Implant Dentistry’s annual meeting at Las Vegas.

Conventional implant osteotomy technique utilizes ample amount of irrigation at 800-1600 rpm in order to prevent overheating a bone. However, utilization of water washes out bone particles collected at implant drills. In contrast, WaterLESS technique is drilling at 40 rpm at 50 Ncm without irrigation. This low speed prevents bone heating, allows bone collection, and increases tactile sensitivity. Using the right shape burs and without water at slow speed, implant clinicians can collect autogenous bone as much as 0.5 cc per osteotomy site (Fig. 1a and 1b).

With conventional osteotomy technique at high speed, the surgeon can’t feel anatomical structure of bone as well as in slow WaterLESS technique.