

# PATRICK V. NICOSIA

====D.D.S., M.S., INC.====

*Exclusively Periodontics & Dental Implants*

## *Hydraulic Sinus Grafting*

*Dr. Leon Chen is a Las Vegas, Nevada periodontist who developed the technique of hydraulic augmentation of the maxillary sinus for implant placement. Conventional therapy has relied upon a lateral wall, or Caldwell-Luc procedure for sinus grafting. This is a reliable and time-tested approach, but one that usually results in considerable post op morbidity and is certainly an excessive approach for single tooth replacement.*

*If a fixed bridge were the only other option to replace tooth #3, I personally would opt for that versus a lateral wall approach. However, in most cases, there is another option, and that is the hydraulic sinus lift procedure. This technique is incredibly patient friendly and rarely causes significant post op morbidity. A 3-4mm diameter osteotomy is performed in crestal bone at the site of implant placement (fig. 2), and must be made such that it stops just inferior to the Schneiderian membrane to avoid perforation. This is the most technique sensitive aspect of the entire procedure. Graft material of choice is then placed in the osteotomy. Instruments resembling elongated amalgam pluggers (fig. 3) are used to hydraulically force graft material superiorly, using the membrane to maintain the graft (fig. 4).*

*If there is 4mm or more vertical height of existing bone, a simultaneous placement of the implant is usually performed (figs. 5 & 6). This is typically enough bone to stabilize the implant while the bone graft matures. If a perforation in the membrane occurs, the procedure is aborted and can be attempted again in less than 2 months, in most cases.*

*I have been performing these procedures routinely on my patients for almost three years and would welcome the opportunity to discuss this incredibly benign surgical technique with you at your convenience.*

*Given the informed choice, would you opt for a lateral wall sinus augmentation in your mouth, for a single tooth replacement? Probably not.*

