

**MAXILLARY SINUS BY-PASS WITH TILTED IMPLANTS VIA  
TAPERED-SCREW BONE EXPANDERS IN LOW DENSITY BONE:  
ONE YEAR FOLLOW-UP OF A CASE SERIES**

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**In the present paper the use of tapered-screw bone expanders (TSBEs) is proposed, in combination with the placement of tilted implants in close proximity to the anterior sinus wall, solving the problem of the reduced height of the alveolar bone in the sub-antral area. The Authors named the procedure: Tilted Implant Expansion Osteotomy (TIEO). Fifteen patients (10 females and 5 males, mean age 47.8±8.15 years) with distal edentulous maxillae were enrolled in this study. For each edentulous site 2 implants were placed, the anterior implant in the area of the most anterior missing tooth while, the posterior implant, immediately in front of the maxillary sinus, with an inclined position. Adopting the aforesaid procedure, 34 cylindrical two-piece implants were placed, 17 of which were placed in tilted position, in order to by-pass the maxillary sinus. After a healing period of 4-6 months, the second stage surgery was performed. The cases were finalized by metal-ceramic cementable restorations with a variable number of elements, from 2 to 4, without any cantilever element. The post finalization follow-up was at 12 months. Survival rate was 100% since no fixtures were lost. At the one-year follow-up the clinical and radiological appearance of the soft and hard tissues was optimal and no pathological signs were recorded. TIEO is a promising surgical procedure for oral rehabilitation of maxillary edentulous sites and represents a therapeutic alternative to sinus lift techniques.**

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