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Hybrid Full-Arch Rehabilitation Using Conventional And Zygomatic Implants: A Short-Term Retrospective Analysis

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Abstract

Objectives: To report one-year outcomes of prosthetic rehabilitation of the atrophic maxillae, supported by angled abutments on zygomatic implants and conventional implants.

Methods: In the present retrospective analysis, edentulous maxillary areas treated with fixed-hybrid prostheses supported by angled abutments of 45, 52.5, and 60 degrees screwed to zygomatic implants inserted using an extrasinus surgical approach were included. Prosthesis, implant, and abutment success/survival rates, complications, Mucosal Seal Efficacy Evaluation (MSEE), modified PLaque Index (mPLI), modified Bleeding Index (mBI), and Zygomatic Implants Classification Level (ZICL) were assessed.

Results: Ninety-eight straight implants and 81 zygomatic implants (21 abutments of 45 degrees, 23 of 52.5 degrees, and 37 of 60 degrees) were inserted into 35 patients. Biological complications: postoperative sinus opacity was observed in seven patients, two of whom experienced a unilateral perforation of the sinus membrane. ZICLO-1 was recorded in 95% of zygomatic sites; the cumulative success rates were 100% and 94.3% when using the implant and prosthesis as units of analysis, respectively.

Conclusion: Survival rate for the implants attested to the highest percentage (100%), whereas survival rate of the prostheses was 94.3%. No differences were registered among the clinical indices related to different inclinations of the abutments.

Keywords: All-on-X; Angled Abutments; Atrophic Jaw; Immediate Loading; Zygomatic Implants.