

EXTRAMAXILLARY SURGICAL TECHNIQUE: CLINICAL OUTCOME OF 352 PATIENTS REHABILITATED WITH 747 ZYGOMATIC IMPLANTS WITH A FOLLOW-UP BETWEEN 6 MONTHS AND 7 YEARS

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PURPOSE

To report the outcome of rehabilitating 352 patients with complete edentulous atrophied maxillae using 747 zygomatic implants in immediate function inserted through the extramaxillary technique.

MATERIALS AND METHODS

Three hundred-fifty-two consecutive edentulous patients with atrophic maxillae were rehabilitated between 2006 and 2012 with 747 zygomatic implants and 795 conventional implants. Implant and prosthetic cumulative survival and success rates were estimated through Kaplan–Meier product limit estimator. Biological and prosthetic complications were recorded after 10 days; 2, 4, and 6 months; and thereafter every 6 months.

RESULTS

Results: Forty-three patients (12.2%) dropped-out, one patient lost the prosthesis (cumulative survival rate = 99.7%), and four patients lost 7 zygomatic implants, rendering an estimated cumulative survival rate of 98.2% (Kaplan–Meier). Ten patients lost 17 conventional implants (patient-specific and implant-specific cumulative survival rates of 96.7% and 97.9%, respectively). Biological complications were observed in 80 patients (22.7%) and resolved in the majority of situations, rendering an estimated cumulative success rate of 94.4% at 7 years for zygomatic implants (Kaplan–Meier). Mechanical complications occurred in 156 patients (44%), with one-third of these complications occurring in patients diagnosed with bruxism before the rehabilitation.

CONCLUSIONS

The rehabilitation of atrophic maxillae with zygomatic implants inserted through the extramaxillary technique in immediate function, alone or in combination with standard implants, is a viable procedure. Until the biomechanical aspects are more predictable and also because of the complexity of the surgical technique, this rehabilitation approach is not ready for every implant clinician to begin using in practice, and prior special training is recommended.