

Dental and Clinical Dentistry 2019: What we need to know about immediate implant placement and provisionalization in the anterior region - Michel Karouni - Karouni Dental Clinic

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Purpose: To investigate per implant soft tissue response following flapless extraction and immediate implant placement and provisionalization (IIPP) associated with bovine hydroxyapatite bone and connective tissue grafting in the anterior maxilla. The study evaluated the effectiveness of this technique in terms of soft tissue contours in esthetic areas with the use of the pink esthetic score (PES).

Materials & Methods: In this retrospective study, 39 consecutive patients were treated and followed by two experienced clinicians for single-tooth implant treatment in the esthetic zone. Treatment consisted of flapless extraction, immediate implant placement, inorganic bovine bone filling of the peri-implant gap, and connective tissue grafting. A provisional crown was placed at the time of implant placement. The final crown was positioned 5 to 8 months after surgery. To assess the esthetic outcome of the technique, the soft tissue

around the tooth to be extracted was scored according to the PES by seven evaluators before the surgery at visit 1 (v1) and at least 1 year after the final prosthesis placement at visit 2 (v2).

Results: After a mean follow-up of 4 years, the mean total PES score on a scale from 1 to 10 was 5.64 and 7.07 at v1 and v2 respectively. Statistical analysis revealed a significant difference between the PES scores before surgery and at the follow-up examination of the anterior single implants ($P = 0.0008$).

Conclusion: Within the limitations of this study, postextraction with immediate implant loading associated with bovine hydroxyapatite and connective tissue grafting is a predictable technique. The esthetic outcome is that soft tissue seems to be maintained or improved significantly according to PES assessment compared with baseline.