Esthetic Assessment of Implants Placed into Fresh Extraction Sockets for Single-Tooth Replacements Using a Flapless Approach.

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Abstract

BACKGROUND:

To validate the concept of immediate implant placement and nonfunctional loading for use in the esthetically sensitive anterior maxilla, clinical trials should ideally include objective esthetic criteria.

PURPOSE:

This study analyzed procedural results as graded by the pink esthetic score and white esthetic score (PES/WES).

METHODS:

Thirty-nine suitable patients (mean follow-up 44.82 ± 28 months) were evaluated.

RESULTS:

Thirty-eight implants fulfilled stringent criteria for successful osseointegration: absence of peri-implant radiolucency, implant mobility, suppuration, and pain. The mean total PES/WES was 15.50 ± 2.67 (range: 10-20). The mean total PES of 7.92 ± 1.60 (range: 5-10) indicated favorable overall peri-implant soft-tissue conditions. Root convexity and texture (1.63 ± 0.54) and curvature of the facial mucosa (1.68 ± 0.47) and distal papilla (1.66 ± 0.48) had the highest mean values, whereas acceptable levels of facial tissue (1.53 ± 0.73) and mesial papilla (1.42 ± 0.64) were the most difficult to fully achieve. The mean mesial and distal bone loss at data collection was, was 1.19 ± 0.54 and 1.15 ± 0.51, respectively. Periodontal disease severity (advanced chronic and aggressive periodontitis) was significantly associated with a low total PES ($p = .048$).

CONCLUSIONS:

Objective PES/WES assessment validated immediate anterior maxillary single-tooth replacement and restoration as being a successful and esthetically predictable treatment modality in sites where the buccal bone had been preserved during the extraction at 1 year of follow-up.