Immediate Loading of Single Post-Extractive Implants in the Anterior Maxilla: 12-Month Results From a Multicenter Clinical Study

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The purpose of the study was to evaluate survival and peri-implant bone levels of single, immediately loaded post-extractive implants in the anterior maxilla 12 months after implant placement. Thirty-six consecutive patients from 3 study centers were included in the study. The concerned sites were upper premolars, canines, and incisors. For each patient the following data were recorded: reason for tooth extraction, bone quality, implant size, and final insertion torque. Implants were placed using a flapless technique and immediately loaded with a nonoccluding temporary restoration. Final restorations were provided 4 months later. Peri-implant bone resorption was evaluated radiographically after 6 and 12 months. The average final insertion torque was 70.55 Ncm. One implant inserted in D3 quality bone with a 35-Ncm seating torque was lost. All other implants had a final insertion torque ranging between 50 and 80 Ncm. The average peri-implant bone loss was 0.437 and 0.507 mm at 6 and 12 months, respectively. All the sites maintained excellent papillae and peri-implant soft-tissue conditions. The resulting 1-year success rate was 97.2%. Immediate nonfunctional loading of single post-extractive implants in the anterior maxilla is a predictable treatment. And it seems that achieving high insertion torques by placing self-tapping/self-condensing implants in an underprepared osteotomy is favorable.