

### Immediate implant placement into fresh first maxillary molar extraction sockets: a prospective study with 80 implants

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**Background:** Immediate implants are nowadays one of the best options to rehabilitate partial and total edentulous patients. Although the classical theories about implant placement surgeries advocate that is recommended several months of healing time between the extraction and implant placement, currently it is accepted that implants placed in the same surgical time as the tooth extraction demonstrate an adequate osseointegration. Furthermore, immediate implants allow an immediate rehabilitation with provisional fixed crowns, in cases where aesthetics is a priority, reduce the surgical time to a one-stage procedure and allow the maintenance of the ridge during the healing process.

**Aim/Hypothesis:** The aim of this present study was to assess the predictability of immediate placement of implants into first maxillary molar fresh extraction sockets, using a modified insertion technique in addition with regenerative procedures.

**Material and methods:** Eighty patients with a total of 80 maxillary first molar scheduled for extraction and immediate implant (3i<sup>®</sup>, ImplantDirect<sup>®</sup>, Straumann<sup>®</sup>) placement, smokers and non-smokers, were included in this study. Following tooth extraction, implant were inserted into the sockets at the inter-radicular septum. The implant platform was kept 1.5 mm apical to the buccal ridge. In accordance with the principles of the guided bone regeneration (GBR) a xenograft was used to fill the periimplant horizontal defects. Was also used a bioresorbable collagen membrane. After 4/6 months of healing period, implants were restored with single crown fixed prosthesis.

**Results:** All implants were monitored for 12-months and only 3 implants failed during osseointegration. The implant survival rate was 96.25%.

**Conclusions and clinical implications:** The findings of this 1-year prospective study showed that the combination of atraumatic extraction of the first maxillary molar with root separation and the use of appropriate regenerative materials at the time of implant placement represents a predictable long-term treatment with favorable outcomes.