

Esthetic relationship between soft and hard tissue regeneration in post-extraction sites

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The challenge to obtain pleasing treatment outcomes is first to minimize tissue loss at the time of tooth extraction, second to regenerate the hard and soft tissue architecture of the natural dentition at surgery and finally to maintain these tissues over time. Following tooth extraction the alveolar process undergoes significant dimensional alterations due to the bundle bone theory. The aesthetic zone of the anterior maxilla is therefore susceptible to aesthetic complications with mucosal recession, radiographic bone loss and inadequate pink aesthetic scores in some interventions. Careful case selection, strict inclusion criteria and high surgical skills have been recommended to obtain pleasing aesthetics. Long-term follow-up studies have been requested to ascertain the stability of the peri-implant tissues, low incidence for complications and long-term implant retention. Understanding the mechanisms, which favor the stability and integrity of the facial tissue dimensions over time will facilitate future innovations in tissue regeneration, surface technology and treatment concepts to provide predictable aesthetic success in implant therapy. The aim of the presentation is to assists clinicians in comprehensive treatment selection to achieve successful long-term outcomes.