

## Complex Replacement of Central Incisors With SPI®ELEMENT RC Implants and Guided Bone Regeneration



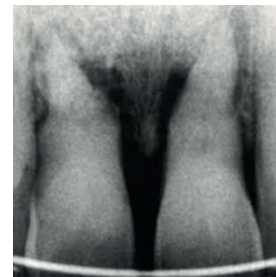
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### The Baseline Situation

Patient with traumatized central incisors

A 43-year-old male patient presented at the dental clinic after traumatizing his central incisors in an accident three years earlier. He presented at the dental clinic with severe tooth mobility and pain.



Severe attachment- and bone loss was diagnosed. The central papilla was still intact.

### The Treatment Strategy



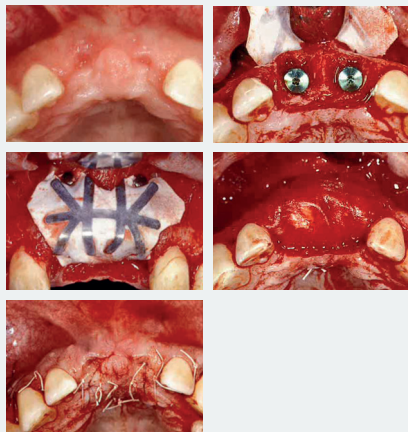
#### 1. Tooth extraction

Extraction followed by placement of temporary removable restoration to provide optimal soft tissue support



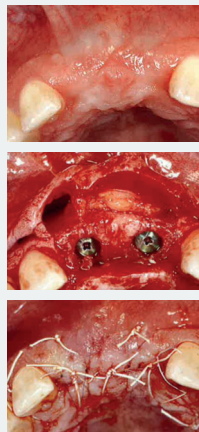
#### 2. Implant placement and guided bone regeneration

Placement of SPI®ELEMENT RC PF 4.0 implants after 8 weeks of healing  
 Bone regeneration with a collagen bovine substitute material covered with a non-resorbable titanium-reinforced membrane and a bilayer native collagen membrane. Closure with a tension-free flap



#### 3. Connective tissue grafting

After 6 months of healing, removing of the membrane and placement of a tissue graft harvested from the palate under the thin buccal mucosa combined with tension-free flap closure after adequate mobilization



#### 4. Healing abutment and prosthetic restoration

4 weeks later, initiation of stage two surgery by placement of a healing abutment to guide soft tissue healing  
 Impression taking and temporary restoration with moderate pressure to support the papilla 4 weeks after stage-two surgery  
 Final restoration with an all-ceramic crown after 6 months. No weakening of the buccal area due to narrow abutment screw size



### The Outcome

Ideal soft tissue conditions with an intact papilla were still present two years after placement of the final suprastructure. Radiographs revealed bone levels equivalent to the attachment level of adjacent teeth

