



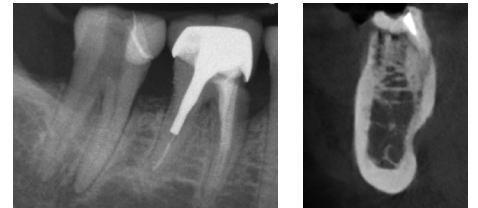
Dr. Nicolas Frydman,  
France



### The Baseline Situation

#### Mesial infiltration and crack in first lower right molar

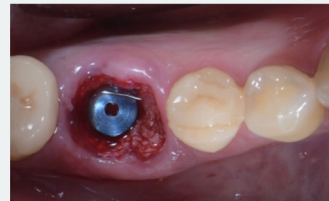
A 44-year-old female heavy smoker presented with mesial infiltration under an old crown and a vertical crack in the first lower right molar. The crown was a monolithic PFM with a post on the distal root. CBCT confirmed buccal bone wall integrity and 17 mm bone height.



### 1 Implant placement

- Root separation and careful extraction
- Gentle osteotomy between septum and distal root
- Placement of an ELEMENT RC implant (PF 5.0, L 11 mm) with a torque of + 45 Ncm
- Careful implant positioning to ensure screw emerged in occlusal area of future crown, enabling a screw-retained crown
- Stabilization of blood clot by filling root gap with small-particle bovine xenograft

### The Treatment Strategy



### 2 Socket seal abutment

- Immediately after implantation, placement of Teflon film between the used VARIO-temp abutment and the implant to prevent chemical contamination of graft material and blood clot
- Shaping of anatomic abutment using flowable composite
- Use of this socket seal abutment to keep graft material in place and avoid shrinkage after bundle bone loss



### 3 Crown placement

- Good soft tissue height and volume compared with baseline observed after 12 weeks
- Placement of screw-retained full zirconia crown



### The Outcome

After a 24-month follow-up, X-rays showed good bone stability. The soft tissue around the implant was healthy, and the patient expressed high satisfaction with the restoration.

