

# Immediate Placement with Straumann Bone Level Roxolid® SLActive® .

**MICHAEL VIZIRAKIS, DDS, MS**  
**PANOS PAPASPYRIDAKOS, DDS, MS**



## Abstract

The patient is a 55-year old Caucasian female (**Fig. 1 , 2**). Her health history is non-contributory, she is a non-smoker, reports no health problems, is not taking any medications, and there are no contraindications to surgery. The patient presented with some pain related to tooth #9 and reported pain on chewing in the area. Tooth #9 was positive to percussion, negative to palpation, negative to cold testing, and had a localized deep probe depth (~9 mm) on the mesio-lingual. Our diagnosis for tooth #9 was a vertical root fracture with pulpal necrosis and we deemed the tooth to be hopeless (**Fig. 3, 4**). After discussing the different treatment options, the patient decided to have an implant placed in the area.

We decided to utilize the patients existing natural crown as a temporary post-implant placement. A jig was fabricated from putty prior to extraction of the tooth (**Fig. 5**). The tooth was atraumatically extracted; the clinical crown was hollowed out and trimmed down to a veneer (**Fig 6**).

The implant, a Straumann® Bone Level Ø 4.1 mm x 12 mm, RC, SLActive® Roxolid® with Loxim™, was placed immediately into the extraction socket with excellent initial stability with the platform of the implant 3 mm apical to the adjacent central incisors free gingival margin position on the mid-facial. A temporary plastic abutment was inserted into the implant and secured, the veneer that was previously prepared from the natural tooth was placed into the jig, which was then lined with acrylic temporary material and a screw retained temporary was fabricated accordingly (**Fig. 7–10**). The temporary was relieved of any occlusal contact in both centric and in excursive.

Our rationale for choosing a Roxolid implant is because it has been shown to be 50% stronger than pure titanium and this patient presented with a clenching habit.<sup>1</sup> As demonstrated by the photographs and radiograph you can see that the clinical result immediately after treatment along with the final restoration was very well accepted by us and more importantly the patient (**Fig. 11–14**).

*“Roxolid is just another example of a great product by Straumann! It’s always a pleasure working with a company that provides high quality products with excellent customer service.”*

—Michael Vizirakis

*“Straumann carries specialized products like Roxolid often required in practice that you cannot find with other implant companies”*

—Panos Papaspyridakos



Dr. Panos Papaspyridakos



Dr. Michael Vizirakis

## Contributors

### Michael Vizirakis, DDS, MS

- DDS degree from the University of Detroit Mercy School of Dentistry
- Certificate in Periodontics Master of Science from the University of Detroit Mercy School of Dentistry
- Diplomate of the American Board of Periodontology
- Fellow of the Royal College of Dentists of Canada
- Private Practice at James Fargher & Associates Periodontics & Implantology, Sarnia, Ontario

### Panos Papaspyridakos, DDS, MS

- DDS degree from the National University of Athens, Dental School, Greece
- Master of Science (MS) degree and a certificate of specialty in Prosthodontics with honorary distinction from Columbia University College of Dental Medicine, New York, USA
- ITI fellowship in Oral Implantology at the Harvard School of Dental Medicine, Boston
- Currently, Assistant Professor of Postgraduate Prosthodontics at Tufts University School of Dental Medicine, Boston
- Candidate for a PhD degree in Dental Biomaterials
- His clinical expertise covers all aspects of implant, esthetic and reconstructive dentistry and his clinical research has resulted in more than 25 publications in international peer-reviewed dental journals

## References

<sup>1</sup>The 50% is calculated from material strength properties of TiZr (according to internal specifications) and Titanium Grade 4 (according to minimal tensile requirements of ASTM F67).



**Fig. 1** Initial full frontal view



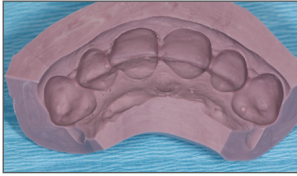
**Fig. 2** Initial close-up frontal view



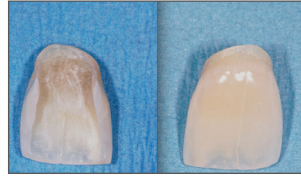
**Fig. 3** Pre-op periapical radiograph



**Fig. 4** Extracted tooth showing vertical root fracture



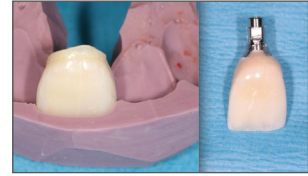
**Fig. 5** Putty Jig fabricated to make temporary restoration



**Fig. 6** Natural crown was shaped into a veneer to be used for the temporary restoration



**Fig. 7** Plastic abutment screwed in place and trimmed down for the temporary restoration



**Fig. 8** Veneer shown in putty jig prior to lining it with temporary acrylic material also final screw-retained temporary restoration shown



**Fig. 9** Immediately post-operatively – temporary screw-retained restoration



**Fig. 10** Immediately post-operatively – Periapical radiograph



**Fig. 11** Final full frontal view showing final restoration



**Fig. 12** Final close-up frontal view showing final restoration



**Fig. 13** Lateral view showing emergence profile of final crown



**Fig. 14** Final periapical radiograph