

# Immediate implant placement in a site with severe buccal dehiscence

Ferdinando D'Avenia Italy



Ferdinando D'Avenia

#### **Patient** 60, male

#### **Clinical situation**

Chronic periodontitis. Tooth # 25 with porcelain fused to metal crown and metal post and core. Vertical root fracture occurred two months earlier. 10 mm "U" shaped buccal dehiscence.

#### Surgical solution

Immediate implant placement (NobelParallel CC RP 4.3 x 13 mm) in combination with a GBR procedure (using creos xenogain and creos xenoprotect).

**Restorative solution** NobelProcera Zirconia Abutment

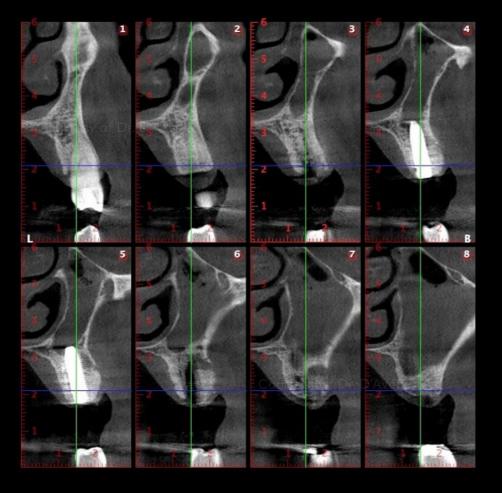
**Surgery date** GBR: May 9, 2016

**Total treatment time** Seven months "creos xenogain is a user-friendly bone grafting material: hydration, manipulation and positioning is simplified by its wettability coupled with a smart syringe packaging that really makes things easy."



Surgical procedure Restorative procedure

### Outcome





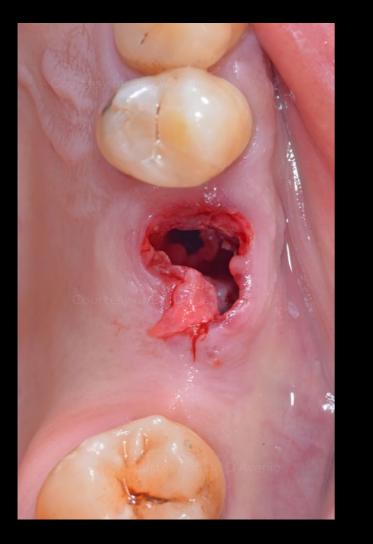
Initial situation: pre-operative CBCT images.

Clinical pre-surgical situation.

### Surgical procedure

Restorative procedure

#### Outcome



After atraumatic tooth extraction, the granulation tissue is completely removed. The osteotomy is prosthetically driven, in order to provide a second premolar screw retained restoration with an occlusal screw access hole. In order to satisfy this criteria, the implant is more favorably housed in predominantly native bone, mesio-lingually to the center of the defect.



The implant (NobelParallel CC RP 4.3 x 13 mm) is placed with 20 Ncm insertion torque, with buccal threads exposed to the defect area (without bone contact).

### Surgical procedure

Restorative procedure

### Outcome



Placement of creos xenoprotect inside the extraction socket to protect creos xenogain from exposure to the soft tissue through dehiscence.



Hydration of creos xenogain with venous blood.

### Surgical procedure

Restorative procedure

### Outcome



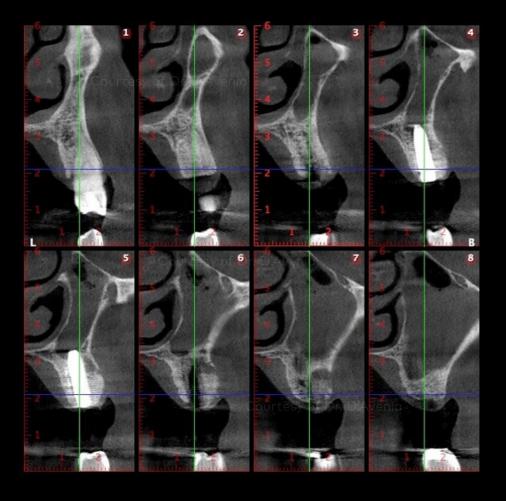


Placement of creos xenogain into the bony defect. The implant is covered with a 3 mm healing abutment ( $\emptyset$  3.6 mm).

Healing after 8 days with slight membrane exposure.

Surgical procedure Restorative procedure

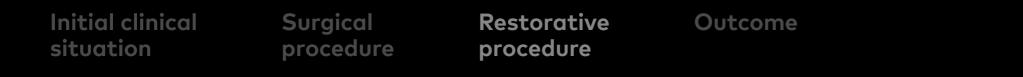
#### Outcome

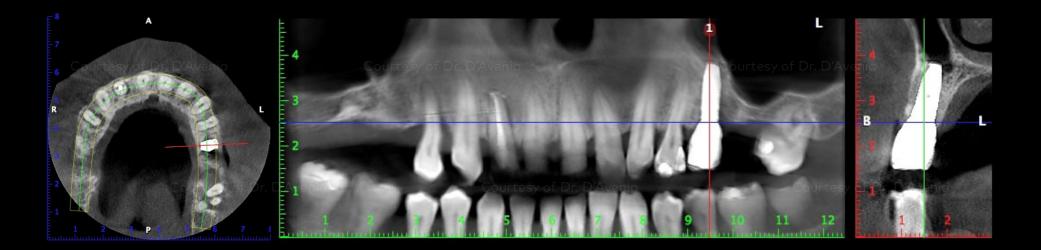


Post-operative CBCT showing sufficient bone augmentation of the buccal wall dehiscence.



120 day follow-up: during the final impression visit, the healing abutment is changed. A wider diameter allows a better management of the final restoration emergency profile.





CBCT after healing.

Surgical procedure Restorative procedure

### Outcome





Final restoration.

Case Courtesy of Dr. D'Avenia



GMT 72421 GB 2011 © Nobel Biocare Services AG, 2020. All rights reserved. Distributed by: Nobel Biocare. Nobel Biocare, the Nobel Biocare logotype and all other trademarks are, if nothing else is stated or is evident from the context in a certain case, trademarks of Nobel Biocare. Please refer to nobelbiocare.com/trademarks for more information. Product images are not necessarily to scale. All product images are for illustration purposes only and may not be an exact representation of the product. Please contact the local Nobel Biocare sales office for current product assortment and availability. Disclaimer: For prescription use only. Caution: Federal (United States) law or the law in your jurisdiction may restrict this device to sale by or on the order of a licensed clinician, medical professional or physician. See Instructions For Use for full prescribing information, including indications, contraindications, warnings and precautions. Legal manufacturer for creos<sup>™</sup> xenogain is NIBEC Co., Ltd., Woel electricity-electronic Agro-Industrial Complex, 116, Bamdi-gil, Iwol-myeon, Jincheon-gun, Chungcheongbuk-do, 27816, Korea.