

Immediate implant placement in a site with severe buccal dehiscence

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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

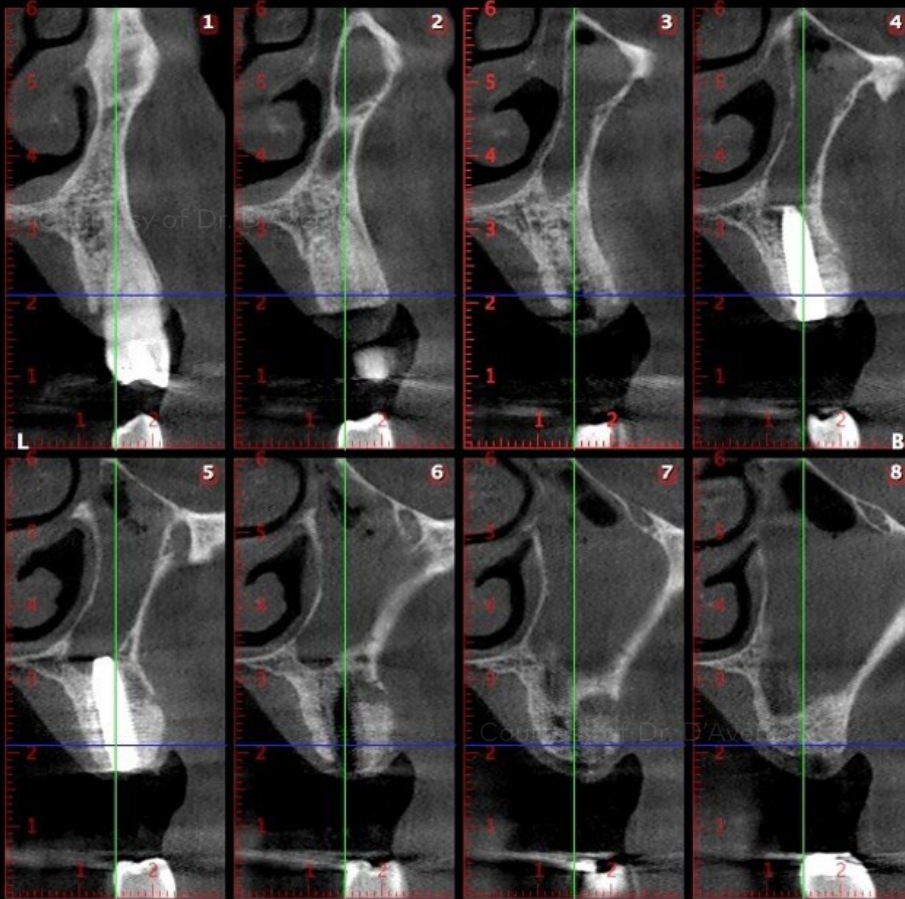
"creos xenogain is a user-friendly bone grafting material: hydration, manipulation and positioning is simplified by its wettability coupled with a smart syringe packaging that really makes things easy."

Initial clinical situation

Surgical procedure

Restorative procedure

Outcome



Initial situation: pre-operative CBCT images.

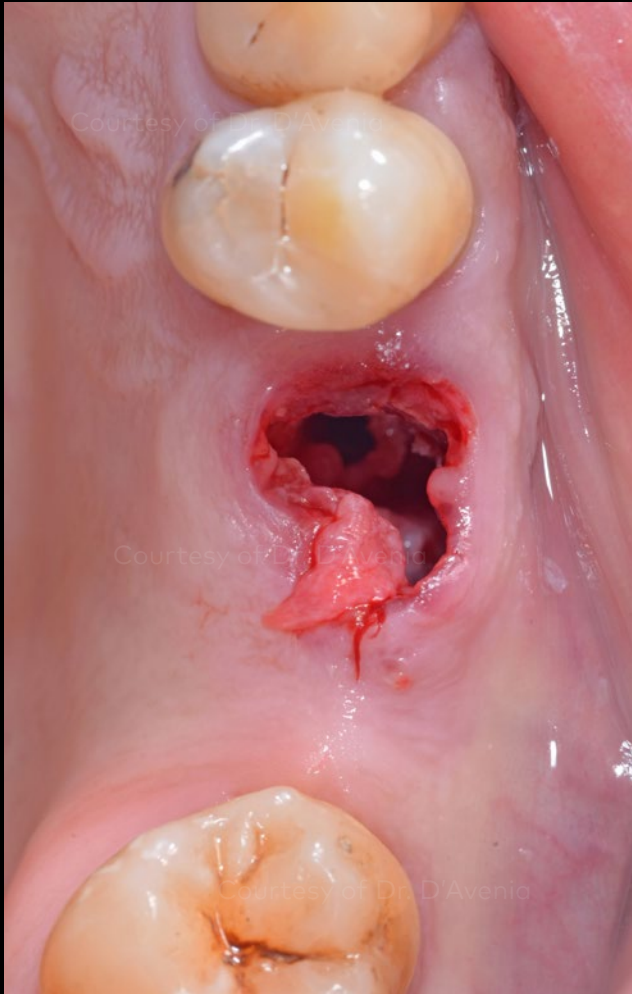
Clinical pre-surgical situation.

Initial clinical 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.

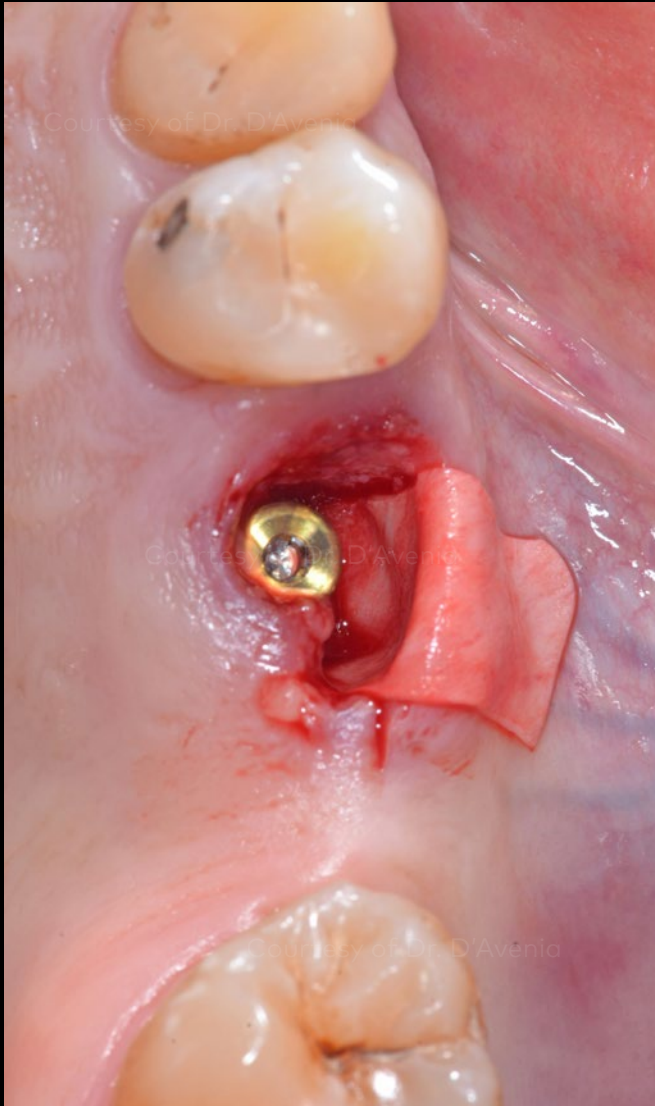
The implant (NobelParallel CC RP 4.3 x 13 mm) is placed with 20 Ncm insertion torque, with buccal threads exposed to the defect area (without bone contact).

Initial clinical situation

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.



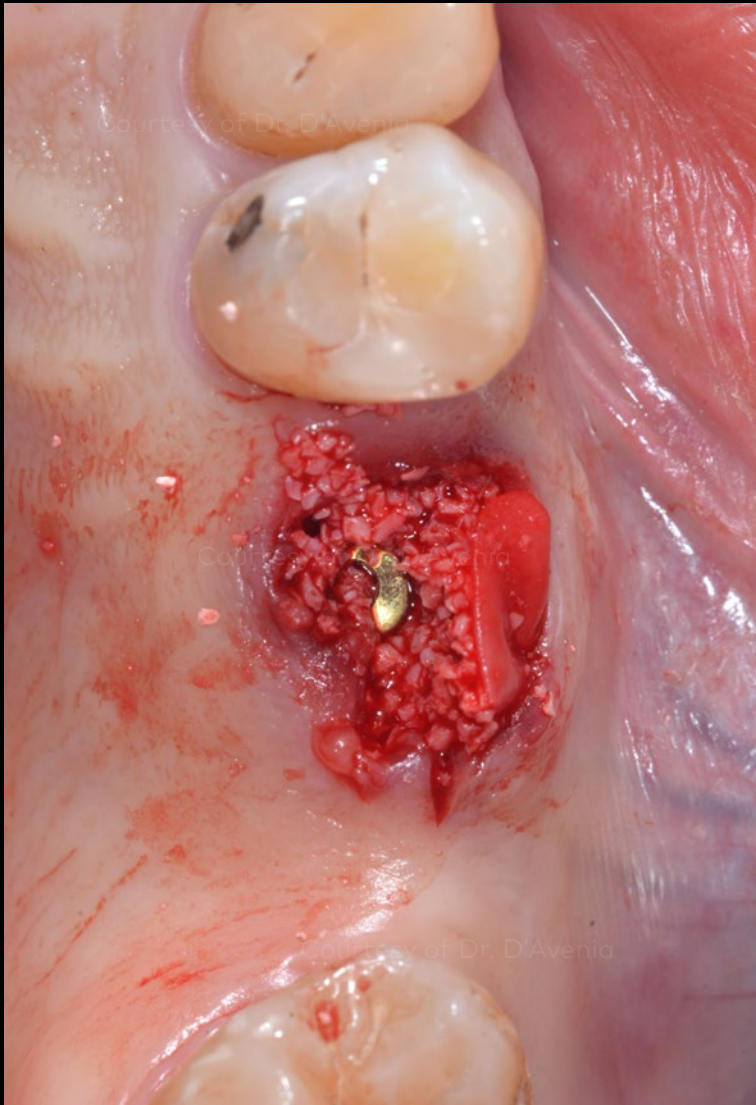
Hydration of creos xenogain with venous blood.

Initial clinical situation

Surgical procedure

Restorative procedure

Outcome



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



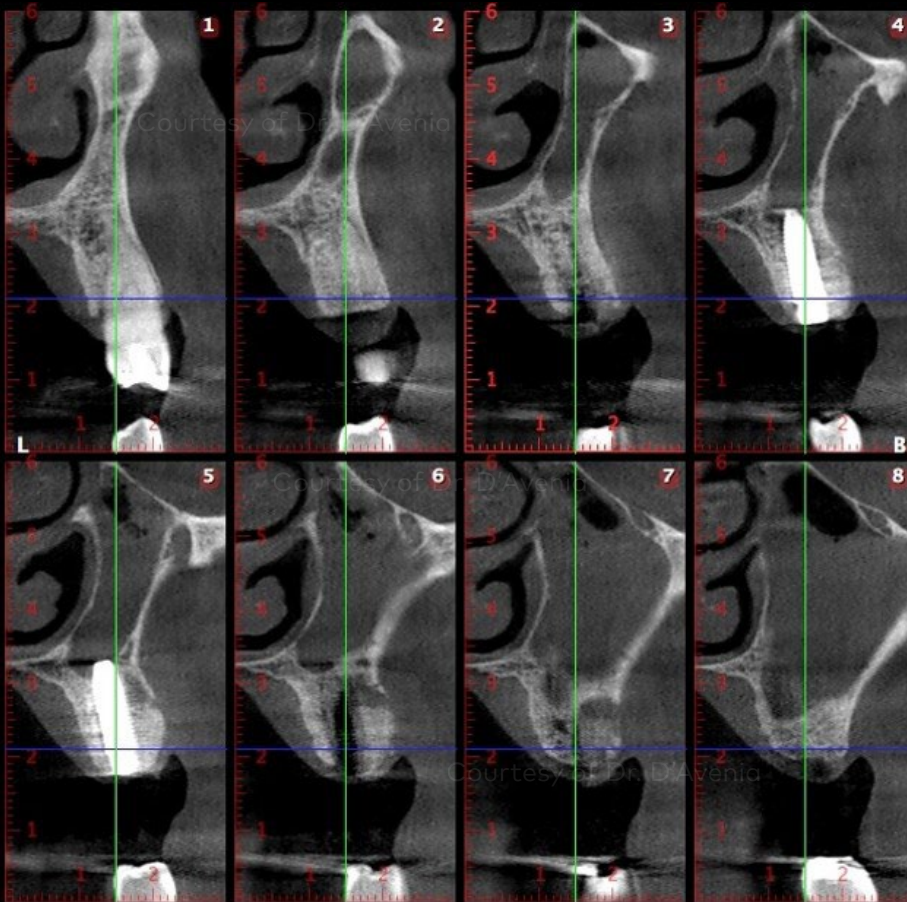
Healing after 8 days with slight membrane exposure.

Initial clinical situation

Surgical procedure

Restorative procedure

Outcome



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



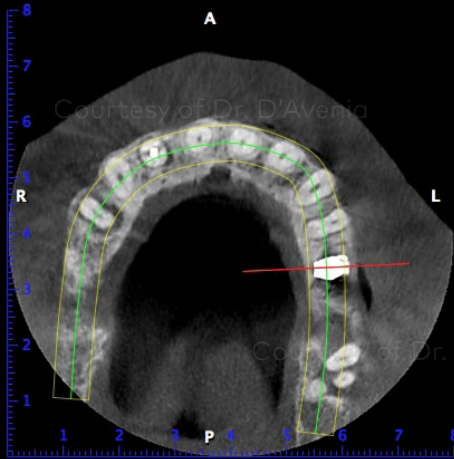
120 day follow-up: during the final impression visit, the healing abutment is changed. A wider diameter allows a better management of the final restoration emergency profile.

Initial clinical situation

Surgical procedure

Restorative procedure

Outcome



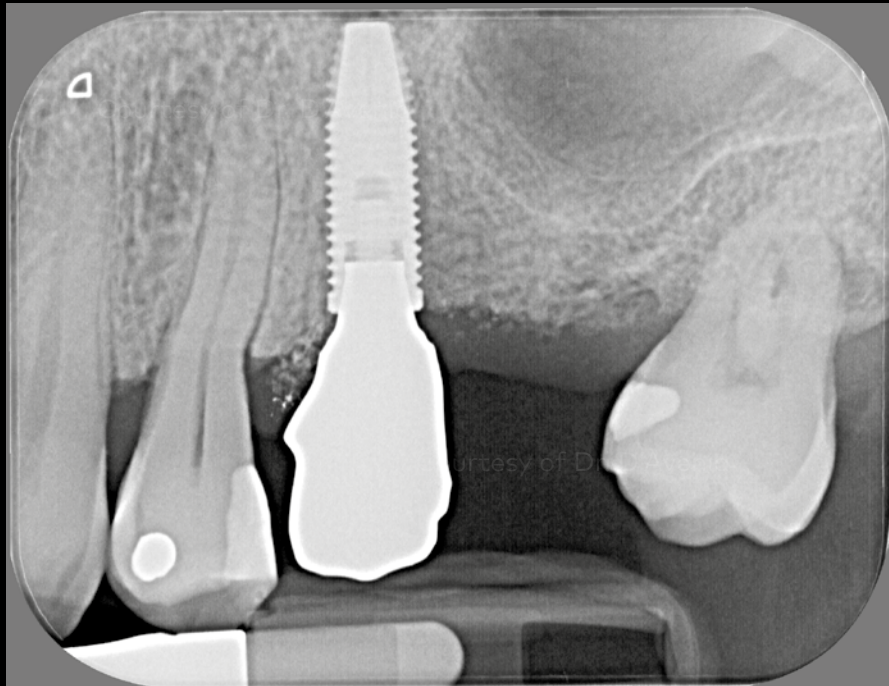
CBCT after healing.

Initial clinical situation

Surgical procedure

Restorative procedure

Outcome



Final restoration.

Case Courtesy of Dr. D'Avenia

