

# GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone

Dr. Fabrizio Colombo, DDS  
Milan, Italy





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### Patient

22 years old, male, no systemic diseases, no oral pathologies or dental problems (patient previously treated with orthodontic treatment).

### Clinical situation

Agensis of 1.2 with moderate loss of buccal convex architecture.

### Surgical solution

Placement of a NobelReplace® CC PMC implant 3.5x11.5 mm.  
Bone Regeneration using Nobel Biocare creos™ xenogain "S" gr. 0.5  
and Nobel Biocare resorbable membrane creos™ xenoprotect 25x30 fixed by pins.  
Soft tissue augmentation using creos™ mucogain.

### Restorative solution

Provisional: Acrylic screw-retained temporary crown.  
Final: individual crown on implant.

### Surgery date(s)

5<sup>th</sup> November 2018.

### Total treatment time

24 months.

### Tooth position(s)

Upper right lateral incisor, 1.2.



Initial clinical  
situation

Treatment  
planning

Surgical  
procedure

Restorative  
procedure

Outcome

## GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone



Young patient, no gummy smile; slight asymmetry exposing slightly more the right side of the oral cavity.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome

## GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone



Agenesis of the upper right lateral incisor provisionally treated using a Maryland bridge.



Occlusal view of the Maryland bridge.

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Treatment planning

Surgical procedure

Restorative procedure

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Lack of the typical vestibular convex architecture in the area of 12 (lateral view).



Lack of the typical vestibular convex architecture in the area of 12 (controlateral view).

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Interdental space wider than ideal one (frontal view).



Interdental space wider than ideal one (occlusal view).

Initial clinical situation

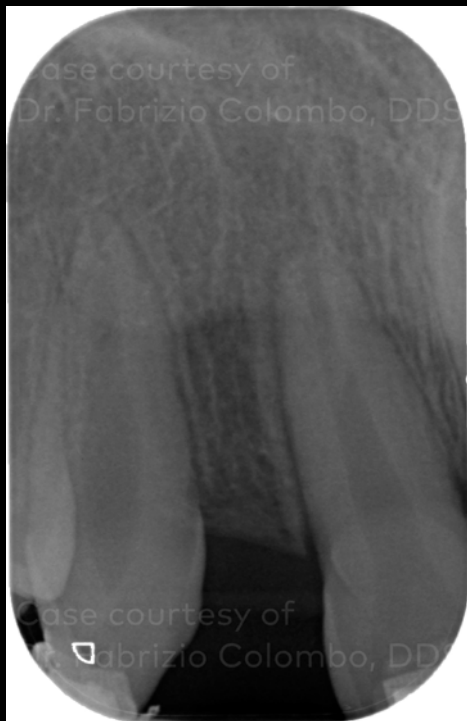
Treatment planning

Surgical procedure

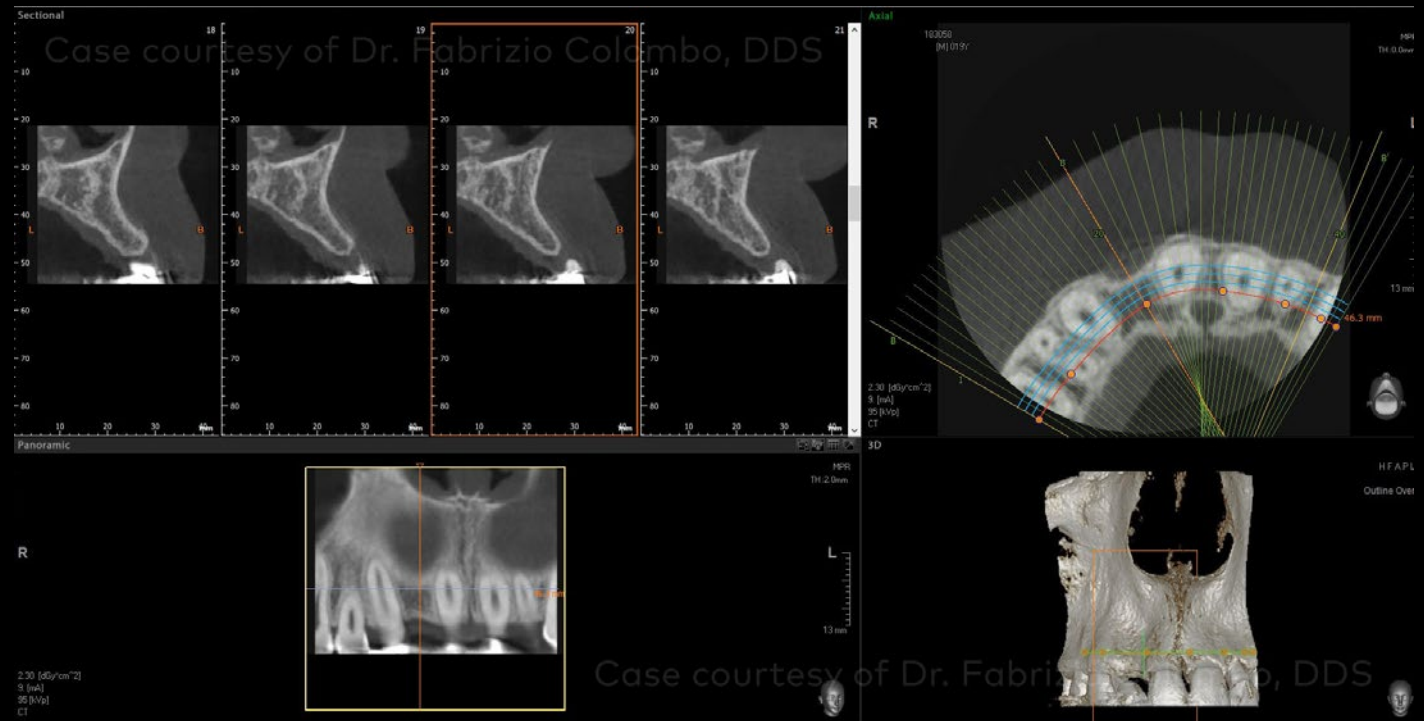
Restorative procedure

Outcome

# GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone



Endoral x-ray of the area to be treated.



CBCT showing a moderate lack of buccal bone.

Initial clinical situation

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Surgical procedure

Restorative procedure

Outcome

## GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone



Initial clinical picture.



Opening of a full-thickness trapezoidal flap.



Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome

## GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone



Implant placement of a NobelReplace® CC PMC 3.5x11.5 mm.



Vestibular fenestration in the apical area of the implant.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

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Execution of osteopromotive holes and placement of a Nobel Biocare creos™ resorbable membrane creos™ xenoprotect on the palatal site using a pin.



Hydratation of the particulate bovine bone (creos™ xenogain „S”) using normal saline solution and patient's blood.

Initial clinical situation

Treatment planning

Surgical procedure

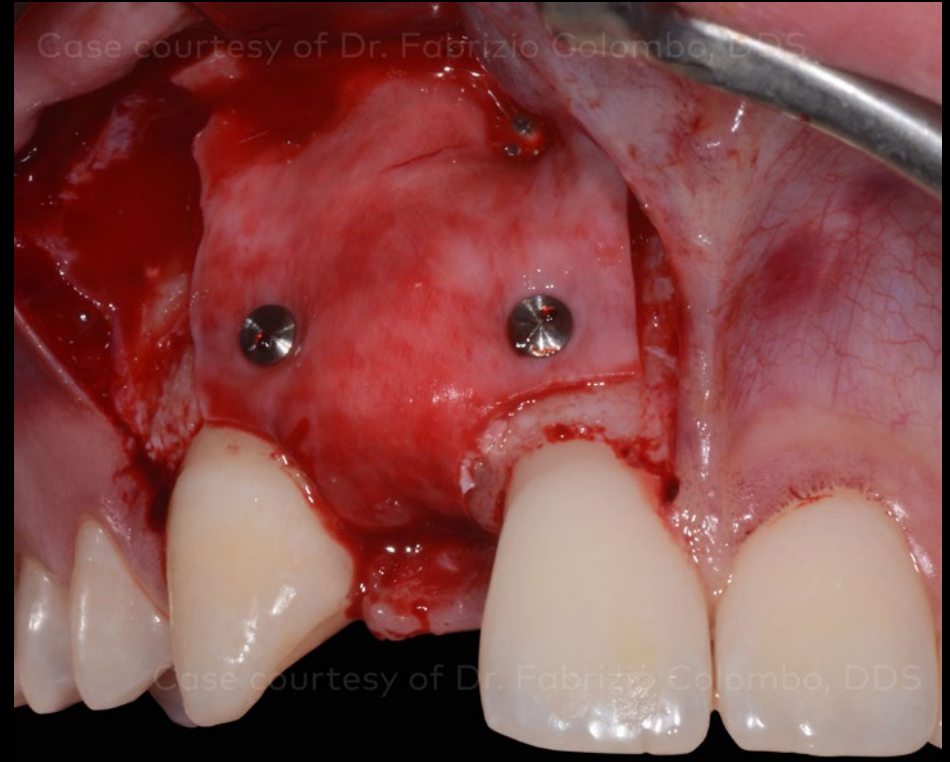
Restorative procedure

Outcome

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Placement of the particulate bone graft on the defect and fenestration.



Placement of the membrane fixed with pins.

Initial clinical situation

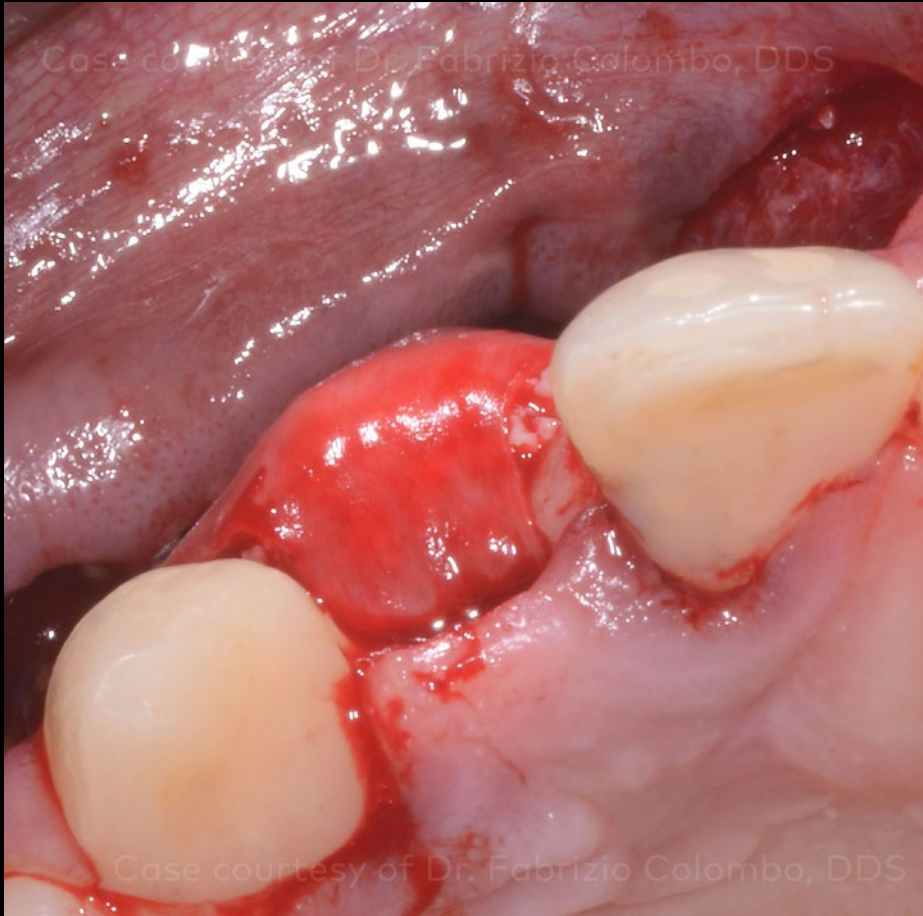
Treatment planning

Surgical procedure

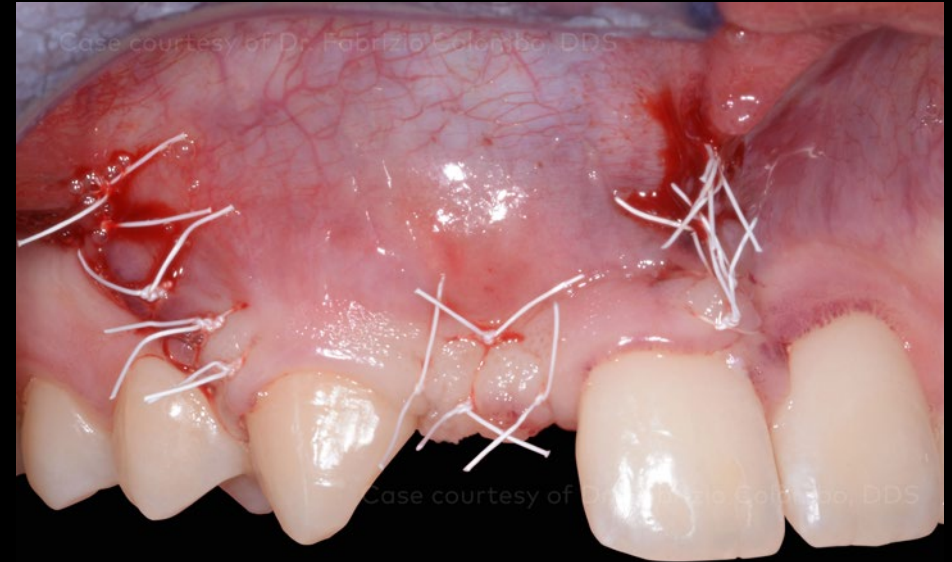
Restorative procedure

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Detail of the membrane in situ (occlusal view).



Closure of the flap by primary intention using PTFE suture.

Initial clinical  
situation

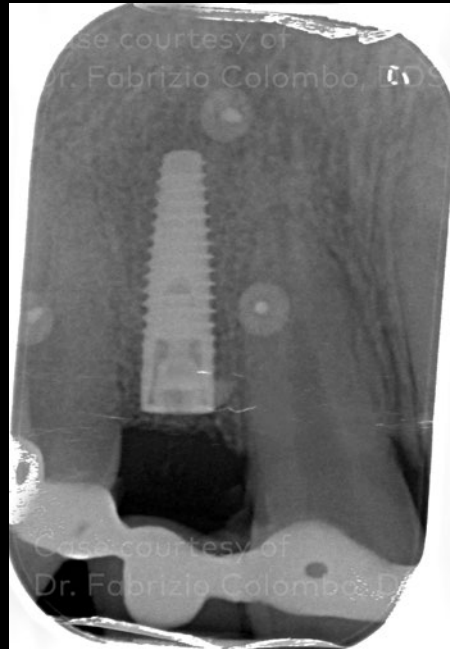
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planning

Surgical  
procedure

Restorative  
procedure

Outcome

## GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone



Post-operative endoral x-ray.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome

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Suture removal after 15 days healing.



Loss of the correct shape of the parabola of 11 due to the crestal repositioning of the upper lip frenulum.

Initial clinical  
situation

Treatment  
planning

Surgical  
procedure

Restorative  
procedure

Outcome

## GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone



Healing 2 months after surgery.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome

## GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone



Reopening.



Improving gingival thickness by using creos™ mucogain.



Initial clinical situation

Treatment planning

Surgical procedure

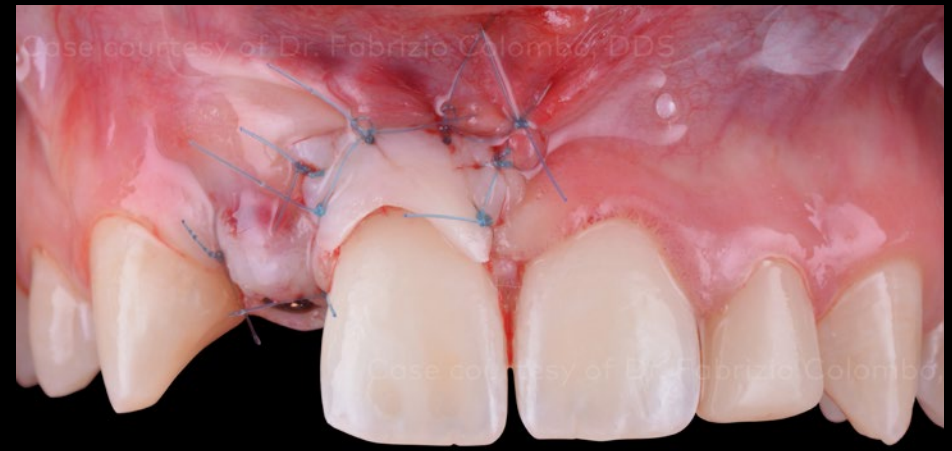
Restorative procedure

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Soft tissue handling: free gingival graft to prevent recurrence of a crestal frenulum insertion.



Immediately post-op clinical picture.

Initial clinical situation

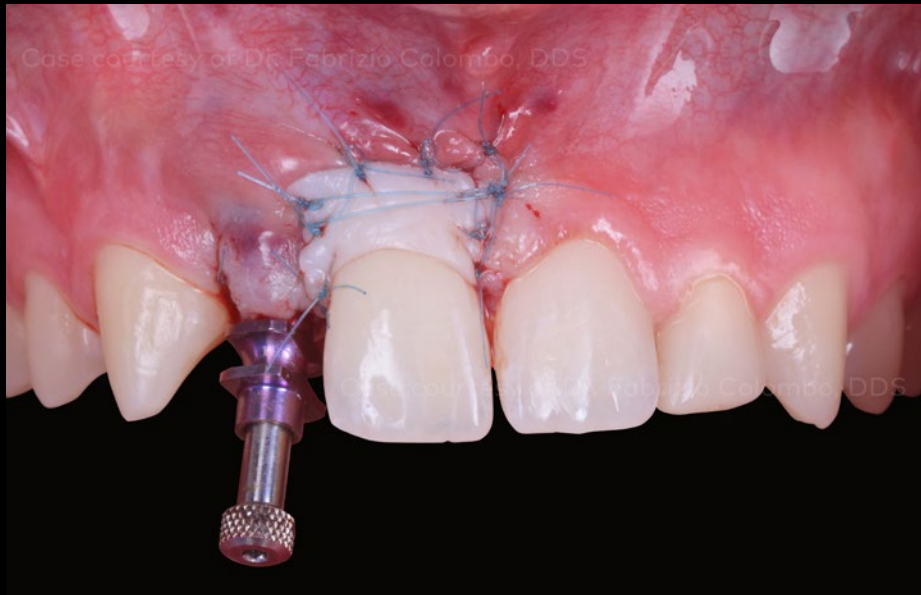
Treatment planning

Surgical procedure

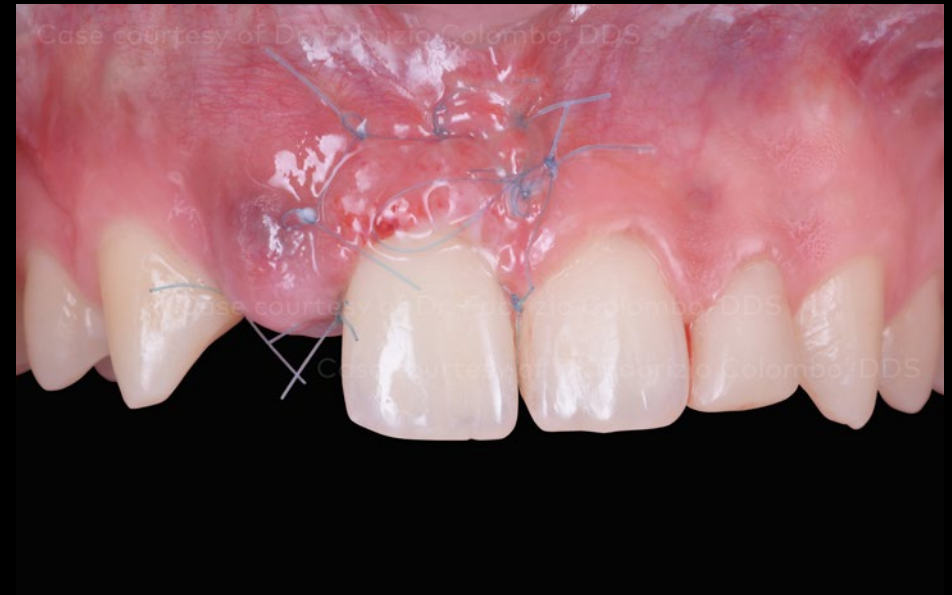
Restorative procedure

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## GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone



Temporary impression taking.



Healing after 10 days.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome

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Acrylic screw-retained provisional crown.



Insertion of an acrylic screw-retained temporary crown after suture removal (10 days after the surgery).

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome

## GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone



Shaping 1.3 and 2.3 using direct composite restoration.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome

## GBR, simultaneous implant placement and soft tissue augmentation in esthetic zone



Soft tissues conditioning by means of the temporary crown.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome

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Healing 2 months after surgery.

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situation

Treatment  
planning

Surgical  
procedure

Restorative  
procedure

Outcome

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Healing 2 months after surgery.

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Surgical procedure

Restorative procedure

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Final screw-retained metal-ceramic crown (frontal view).



Final screw-retained metal-ceramic crown (lateral view).



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situation

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Case courtesy of  
Dr. Fabrizio Colombo, DDS

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Healing 2 months after surgery.

Initial clinical  
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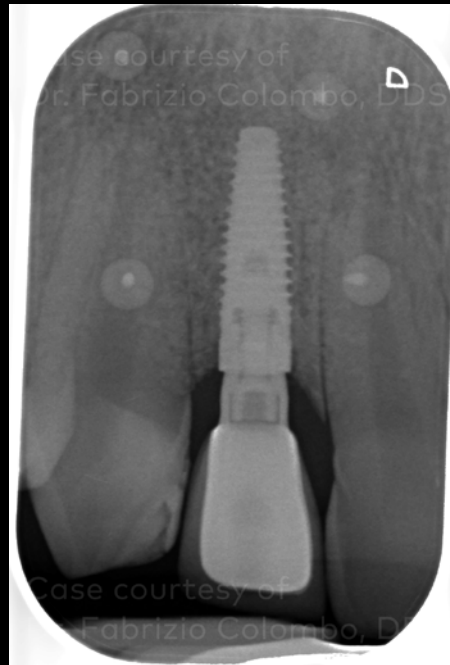
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procedure

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Healing 2 months after surgery.

## Case courtesy of Dr. Fabrizio Colombo, DDS



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