

CLINICAL CASE



# Buccal bone augmentation during immediate implant placement

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**Patient**

24-year-old female

**Clinical situation**

Hopeless tooth 11 after traumatic accident with discoloring, persistent pain and mobility grade II.

**Surgical solution**

Immediate implant placement with gap augmentation using creos™ xenogain (small granules).

**Restorative solution**

Immediate provisional restoration.  
Final restoration:  
NobelProcera® ASC  
Abutment with veneered zirconia.

**Surgery date(s)**

May and August 2016

**Total treatment time**

3 months

"What impressed me about creos xenogain was the variety of sizes and dosage forms, each offering very good handling properties."

## Initial clinical situation

## Surgical procedure

## Restorative procedure

## Outcome



Pre-operative situation: single x-ray after three months of endodontic treatment after trauma.

In the facial view, tooth 11 (FDI) appears discolored with persistent pain and mobility grade II (Miller).

## Initial clinical situation

## Surgical procedure

## Restorative procedure

## Outcome



Extraction of hopeless tooth 11 (FDI), with intact buccal bone.

Pilot-drill with a lab side drilling guide and extension drill into the alveolar-palatal bone.

## Initial clinical situation

## Surgical procedure

## Restorative procedure

## Outcome



Immediate implant placement using a NobelActive® 4.3 × 13 mm implant.

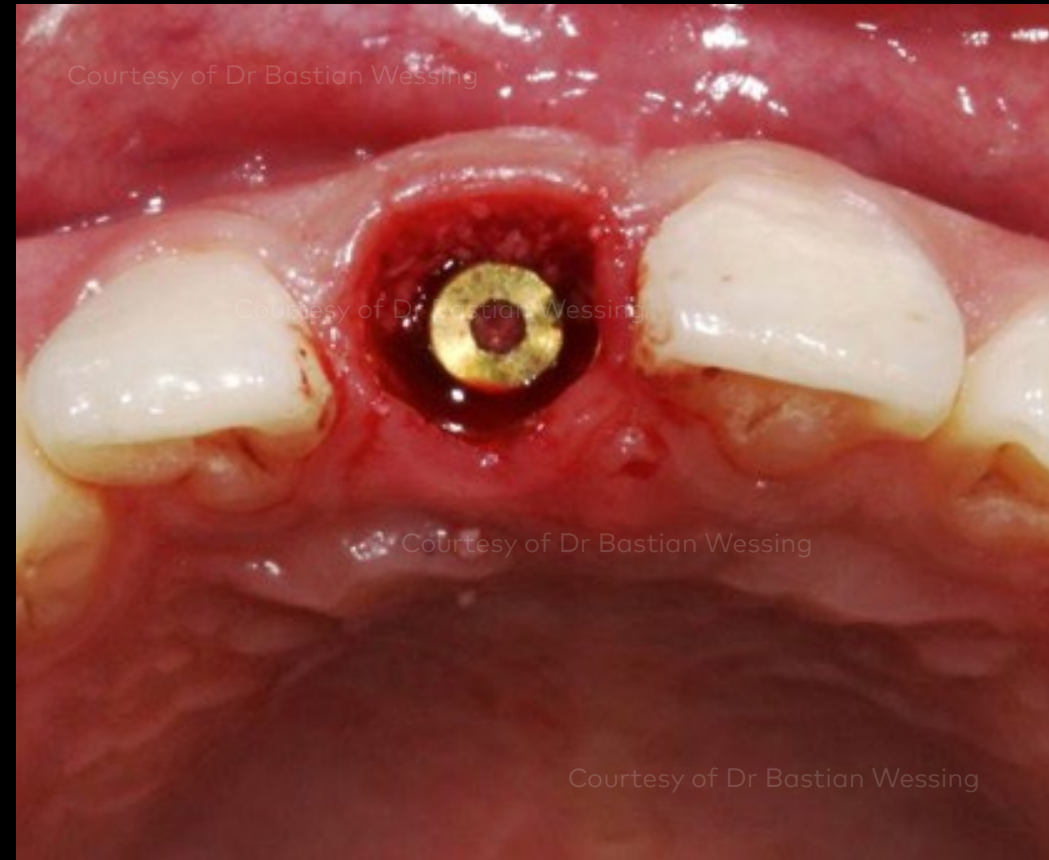
Optimized implant placement: slightly palatal without compression or even contact with the buccal bone.

## Initial clinical situation

## Surgical procedure

## Restorative procedure

## Outcome



Augmentation of the buccal gap with creos xenogain (small granules) to reduce bucco-palatal resorption of the alveolar ridge volume.

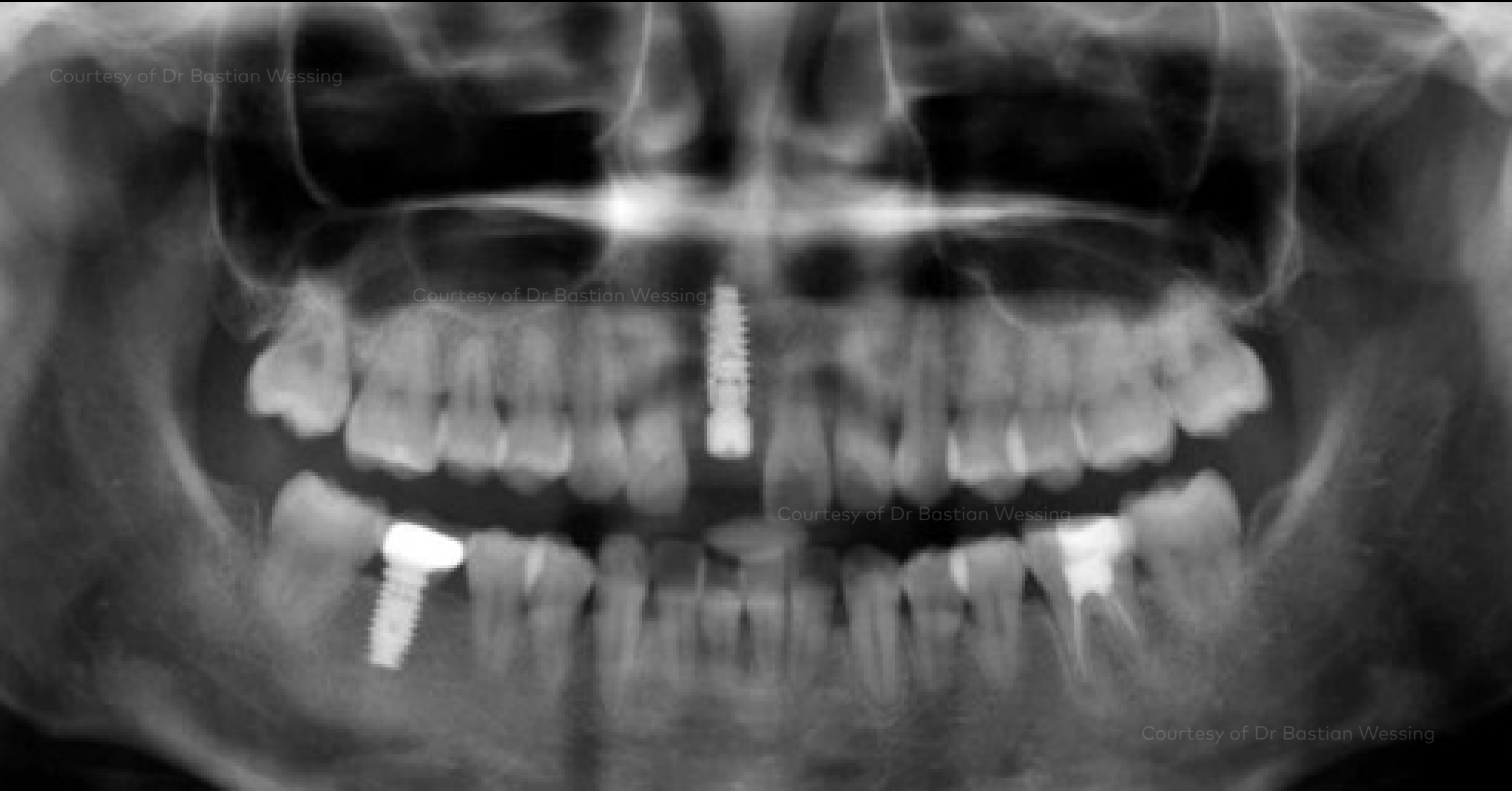
Occlusal view after gap augmentation.

**Initial clinical situation**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Panoramic radiograph after implant placement.

## Initial clinical situation

## Surgical procedure

## Restorative procedure

## Outcome



Screw-retained provisional titanium abutment after opaque application.

Facial view of a chairside provisional for immediate restoration.



## Initial clinical situation

## Surgical procedure

## Restorative procedure

## Outcome



Occlusal view of the emergence profile after two months healing time.



Impression with an impression coping in an open-tray technique.

## Initial clinical situation

## Surgical procedure

## Restorative procedure

## Outcome



Veneered zirconia NobelProcera ASC Abutment for a screw-retained single implant crown.



Side view of the finalized NobelProcera ASC Abutment with the Omnigrip™ screwdriver on the master cast.

## Initial clinical situation

## Surgical procedure

## Restorative procedure

## Outcome



Occlusal view of the final restoration after three months treatment time. Note the slight bucco-palatal resorption of the alveolar ridge.



Facial view of the final restoration.

**Initial clinical situation**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Facial view of the final restoration.

## Case courtesy of Dr. Bastian Wessing

