

CLINICAL CASE



Simultaneous sinus floor lift and placement of a metal-free implant

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Patient

35-year-old, female, good general and oral health

Clinical situation

Tooth 26 removed 2 years before rehabilitation

Surgical solution

NobelPearl™ Tapered RP
Ø 4.2 mm x 10 mm

Restorative solution

NobelPearl Abutment Straight
Inter-X RP 1 mm with monolithic zirconia crown

Surgery date

December 2017

Total treatment time

4 months

Tooth position

26 (FDI system)

"Because of the tapered design of the implant body and geometry of the threads, NobelPearl™ can be used in the rehabilitation of a broad range of indications, from single-tooth restoration to more challenging cases such as simultaneous sinus lift and implant placement, where high primary stability is required."



NobelPearl™ implant, final restoration and abutment w NobelPearl™ implant, final restoration and abutment with VICARBO® screw which is made of carbon fiber-reinforced polymer for a 100% metal-free implant system.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome



Healed site 2 years after extraction of tooth 26.
Note the lateral (left) and vertical (right) bone remodeling.

Initial clinical situation

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Restorative procedure

Outcome



Presurgical digital volume tomography (DVT) shows the vertical bone remodeling 2 years after extraction of tooth 26.

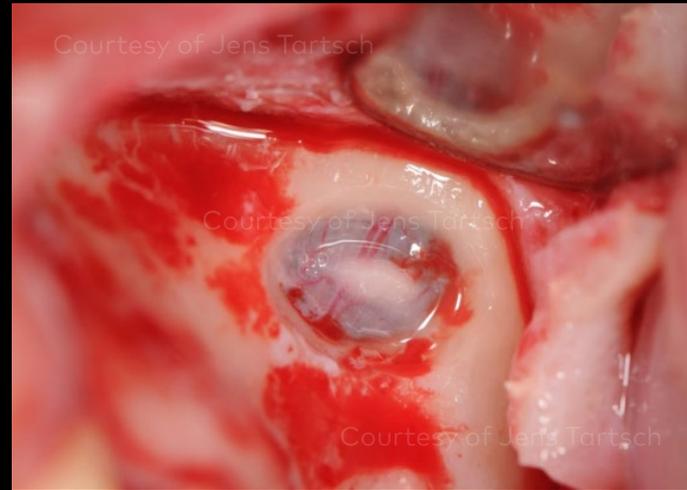
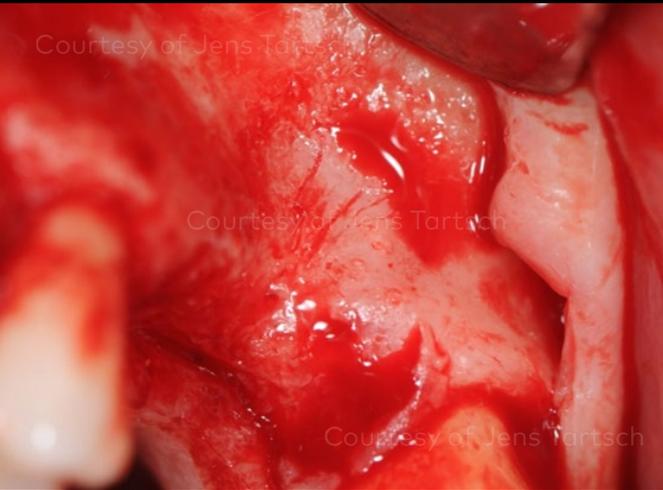
Initial clinical situation

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Flap opening and surgical site preparation.

Sinus window preparation and access to maxillary sinus.

Sinus floor elevation.

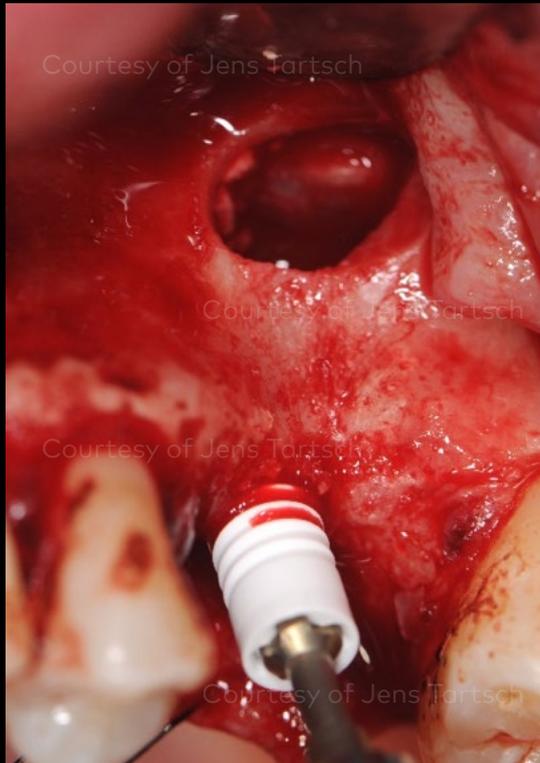
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Inserting the NobelPearl Tapered
Ø 4.2 mm x 10 mm implant.

Implant inserted 0.6 mm supracrestal.

Sinus filled with deproteinized bovine bone.

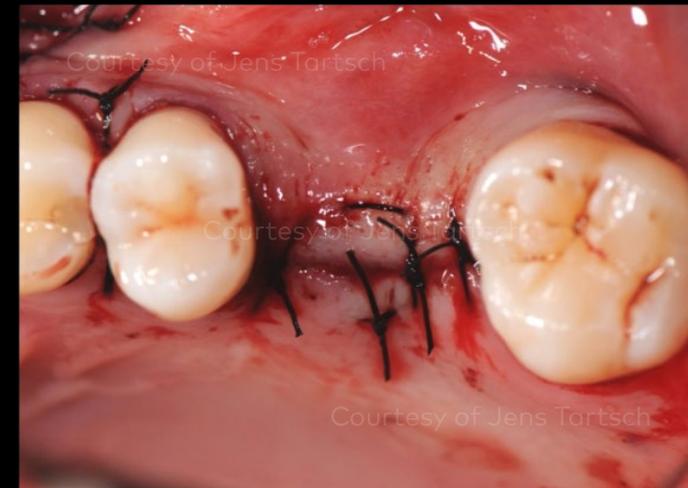
Initial clinical situation

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Horizontal augmentation using deproteinized bovine bone.

Bone substitute covered with resorbable collagen membrane.

Primary wound closure.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome



The re-entry took place 3 months after implant insertion with small crestal incision. Healthy soft tissue 2 weeks after re-entry around the gingiva cap.

Placing the NobelPearl Impression Coping Closed Tray Inter-X onto the implant.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome



NobelPearl Impression Coping Closed Tray Inter-X and lab Replica Inter-X.

Repositioning of the NobelPearl Impression Coping Closed Tray Inter-X in the impression material with the NobelPearl Implant Replica Inter-X and making sure that it is fully seated.

Initial clinical situation

Treatment planning

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NobelPearl Abutment Straight Inter-X placed on the master cast with gingiva mask.

Monolithic zirconia crowns placed on the master cast.

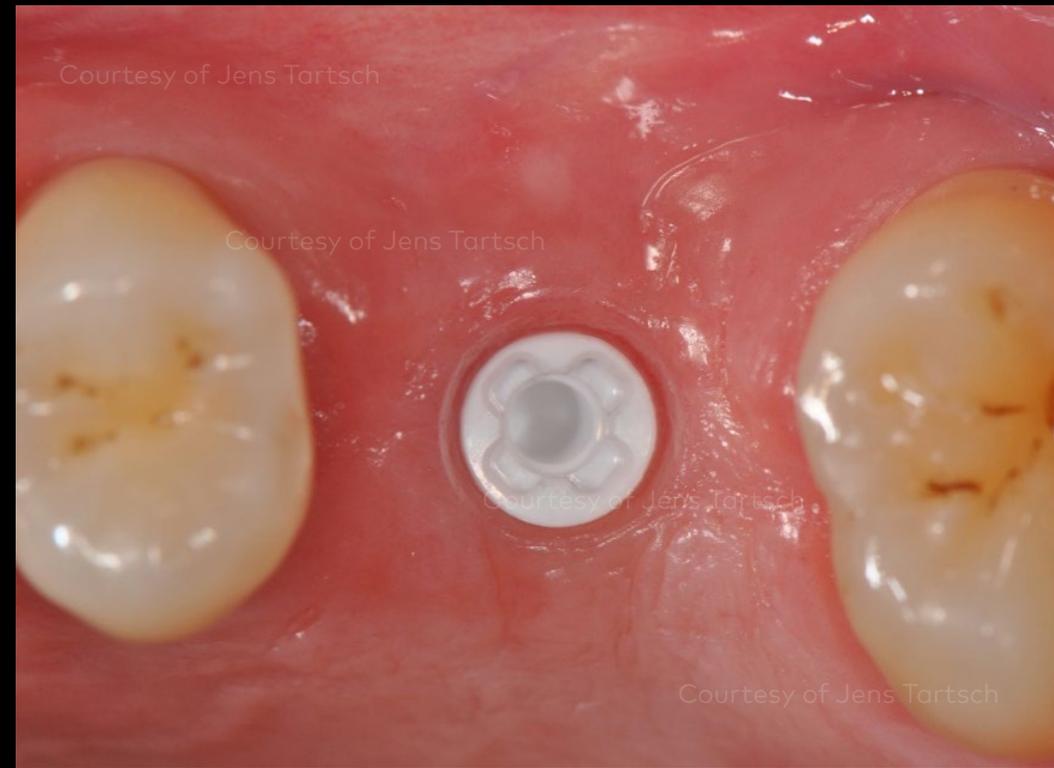
Initial clinical situation

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Outcome



Healthy and thick keratinized peri-implant mucosa seen following removal of the NobelPearl Healing Abutment Inter-X 4 months after surgery.

Initial clinical situation

Treatment planning

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Restorative procedure

Outcome



Try-in of the NobelPearl abutment.



Abutment in situ, with VICARBO® screw torqued 25 Ncm.

Initial clinical situation

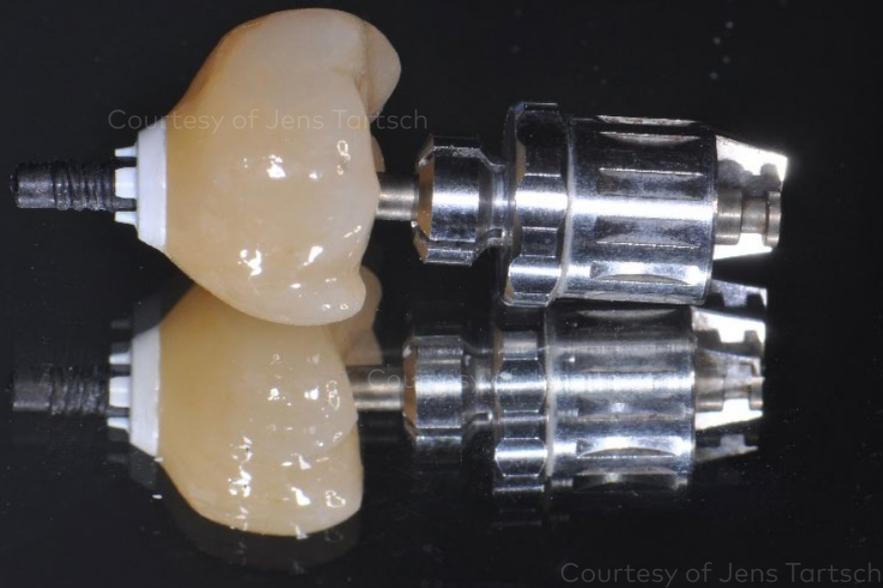
Treatment planning

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Restorative procedure

Outcome

Courtesy of Jens Tartsch



Courtesy of Jens Tartsch

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After restoration was cemented to the abutment intraorally, it was taken out of the mouth for cleaning.

Courtesy of Jens Tartsch



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Final insertion of the restoration with ratchet and torque 25 Ncm

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome



Restoration after installation and closing the screw access hole with Teflon.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome



Final restoration after screw access hole closed with composite.

Initial clinical situation

Treatment planning

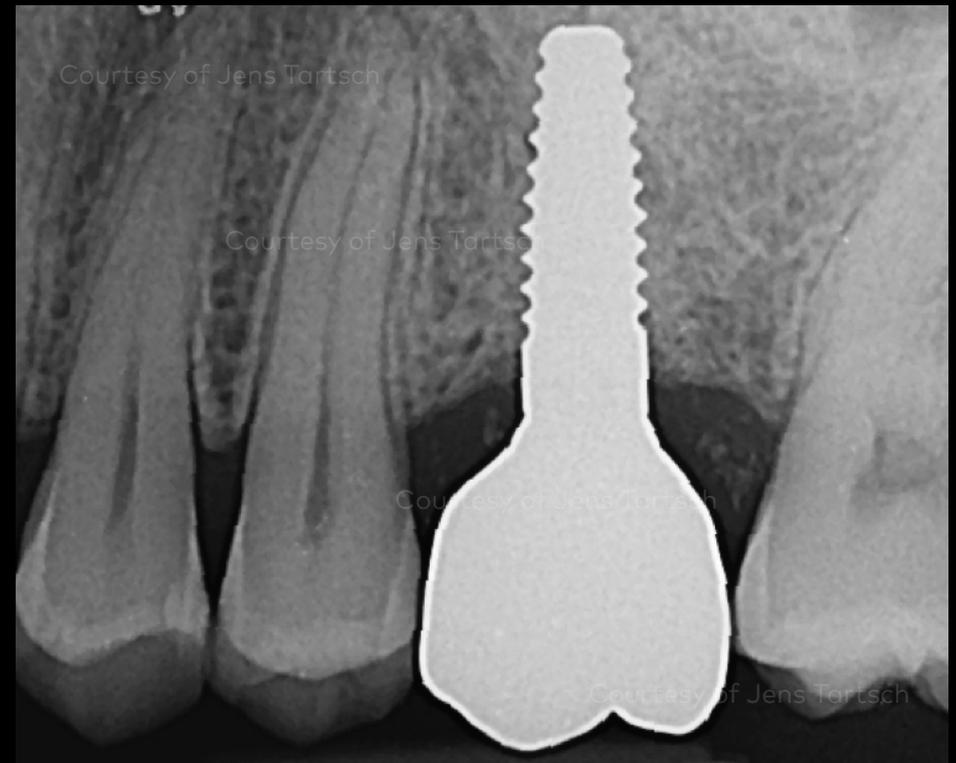
Surgical procedure

Restorative procedure

Outcome



X-ray 3 months after implant insertion before loading.



1-year follow-up after loading.
X-ray radiography shows excellent bone level preservation.

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome



Note the healthy mucosa without any signs of inflammation after removing the crown for control at 1-year follow-up.

1-year follow-up.
Esthetic excellence with zirconia final restoration and very healthy soft tissue.

Case courtesy of Dr. Jens Tartsch

