DESS

Clinical case

DESS® C-Base and Cerec® Sirona® system: perfect combination and agile solution

Dr. Konstantinos Tokmakidis presents a zirconia crown on tooth 15 with a C-Base

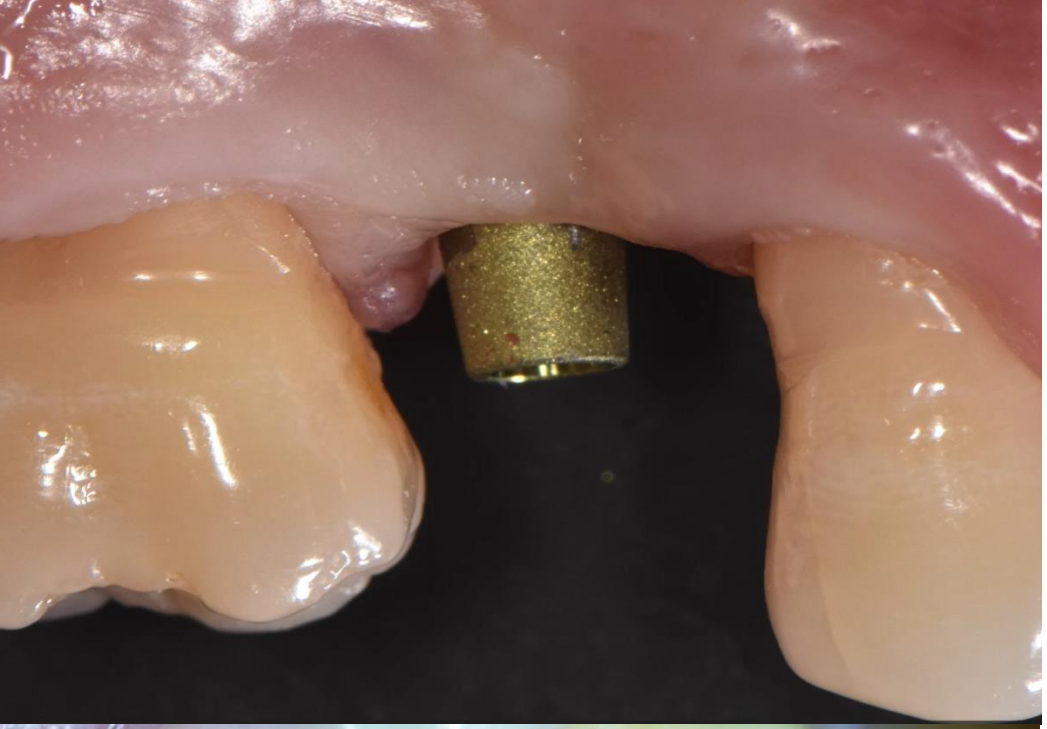
Dr. Konstantinos Tokmakidis
(Switzerland)

CASE PRESENTATION

A male patient, with no underlying conditions, but a smoking habit, presented himself with a missing upper second right premolar. The patient opted for an implant reconstruction; a Nobel Active NP was placed in June 2024 with a type-4 surgery (late insertion). The primary stability was excellent, which made a transmucosal healing possible.

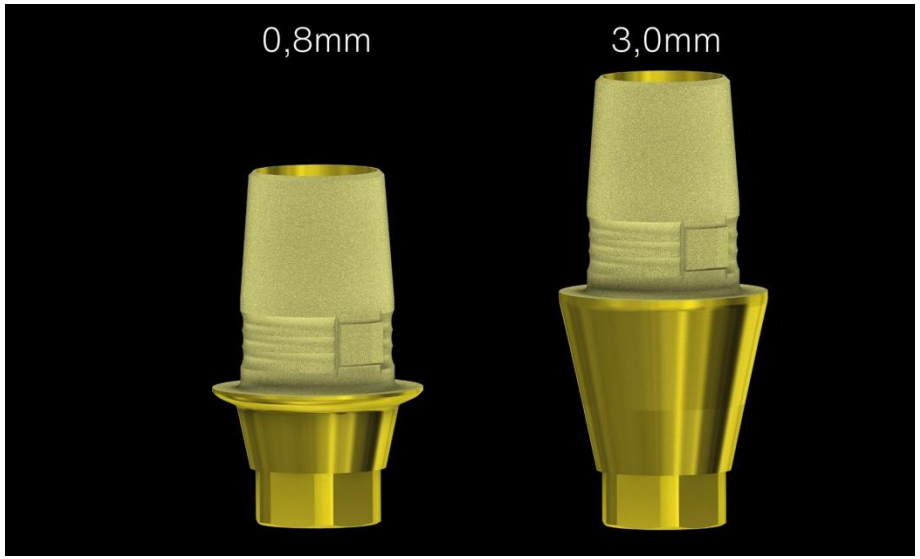
After the needed osseointegration time, the restoration was planned with a C-Base.

Initial situation



The C-base for Nobel Biocare Implants with a conical connection is available at two heights: 0,8 and 3mm.

In the case presented, the restorative space was limited, which led to the choice of the shorter base and the subsequent customization of the supra-crestal abutment design.



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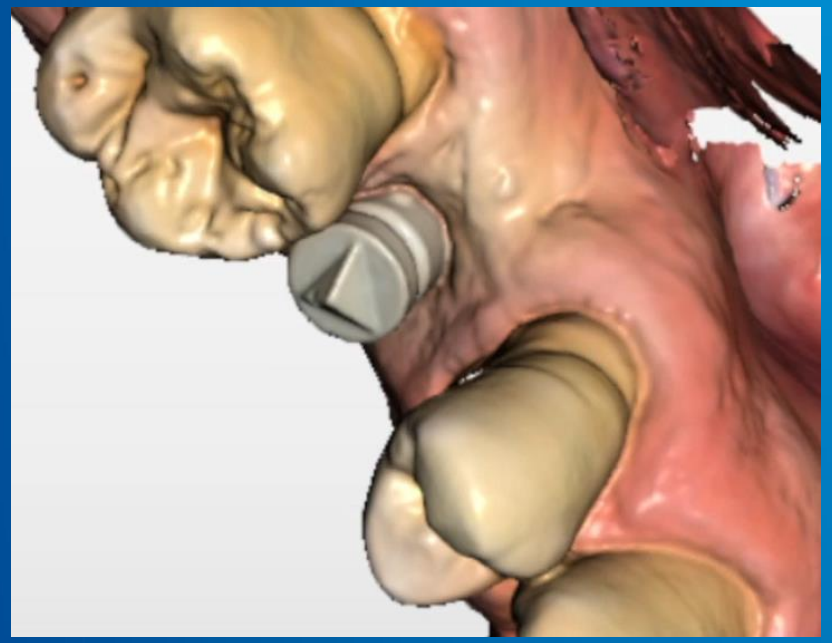
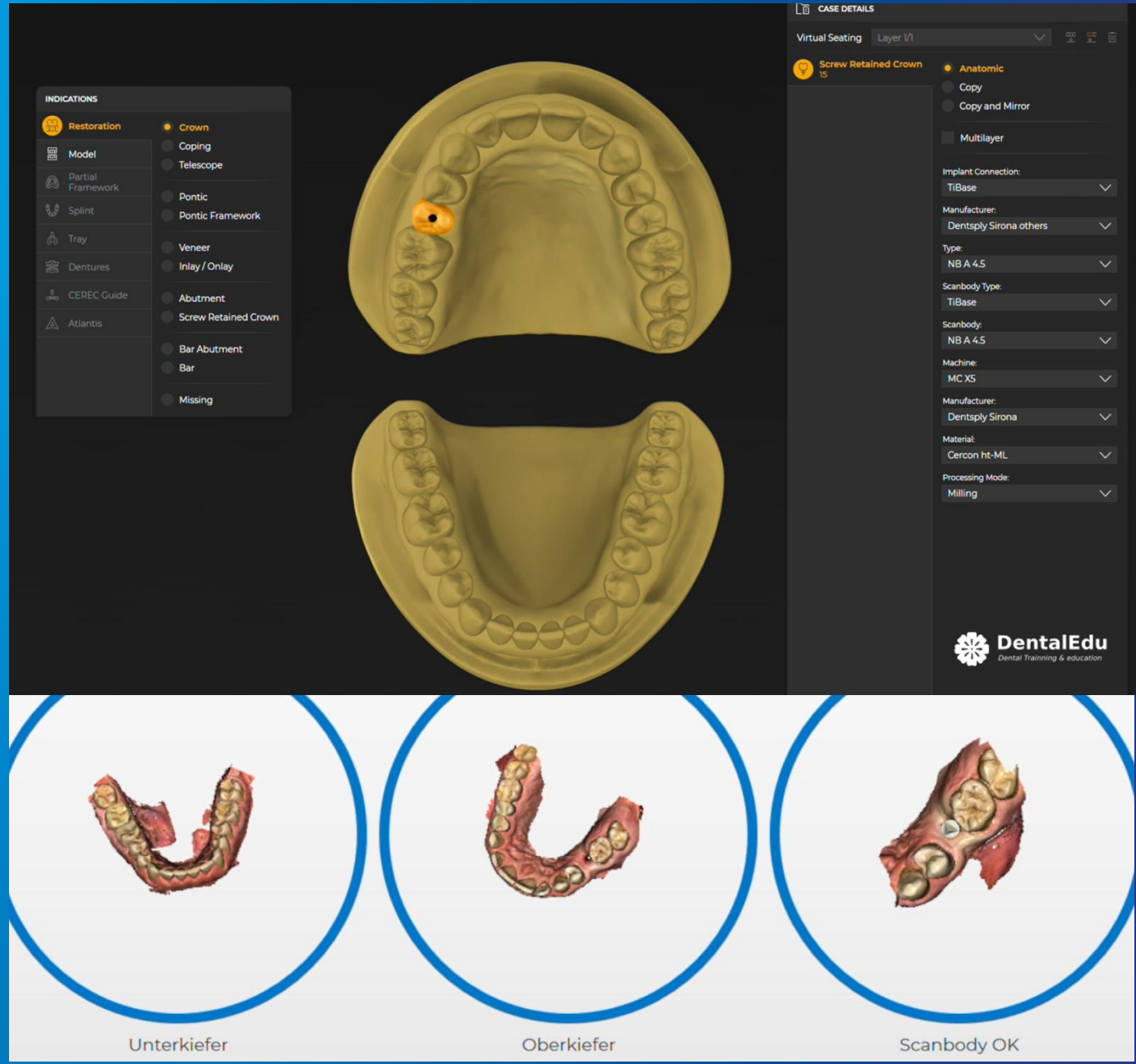
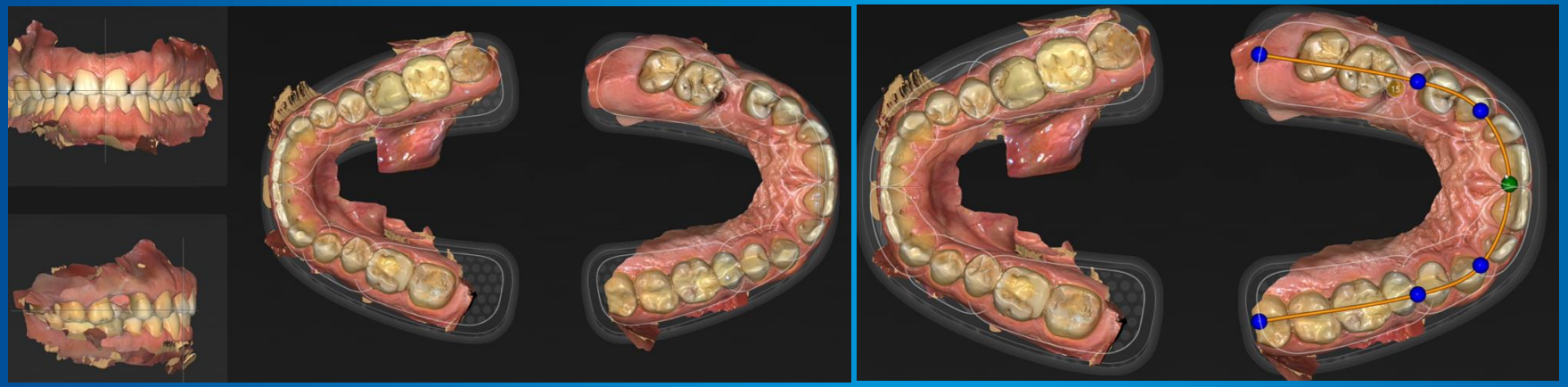
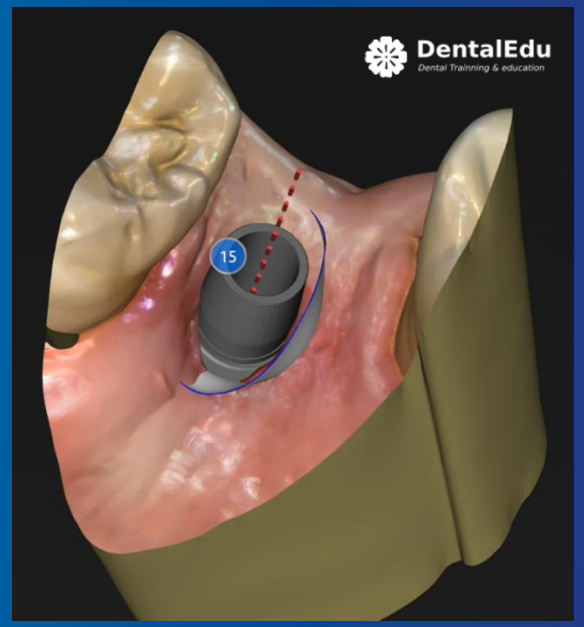
The C-Base can be positioned intraorally and is specifically design to carry the CEREC/inLab scanbody. In this manner, the base is being used as a scanpost.

To properly design the restoration, four scans need to be performed: upper jaw with the mucosal design, upper jaw with the scanbody, lower jaw and the bite registraiton.



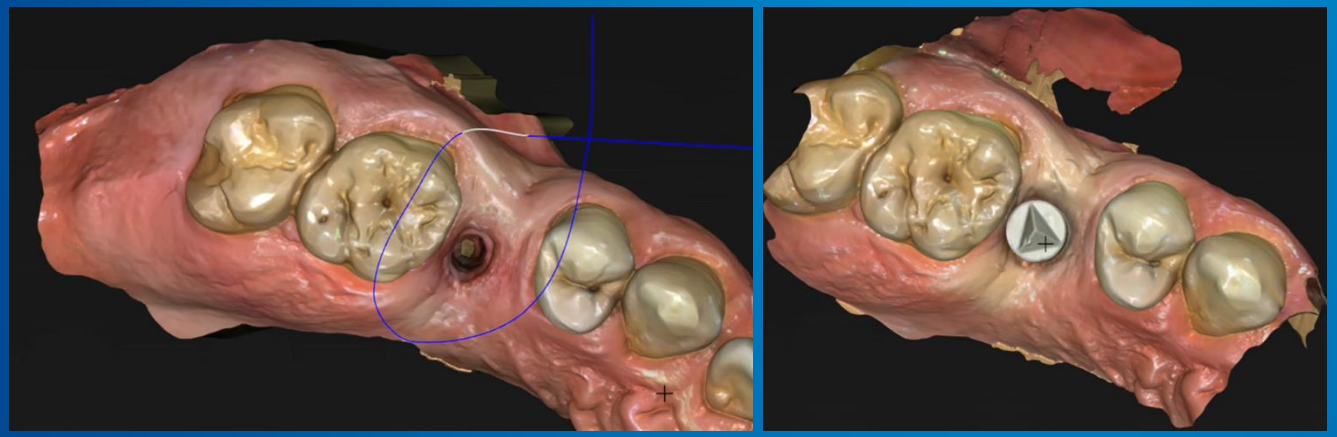


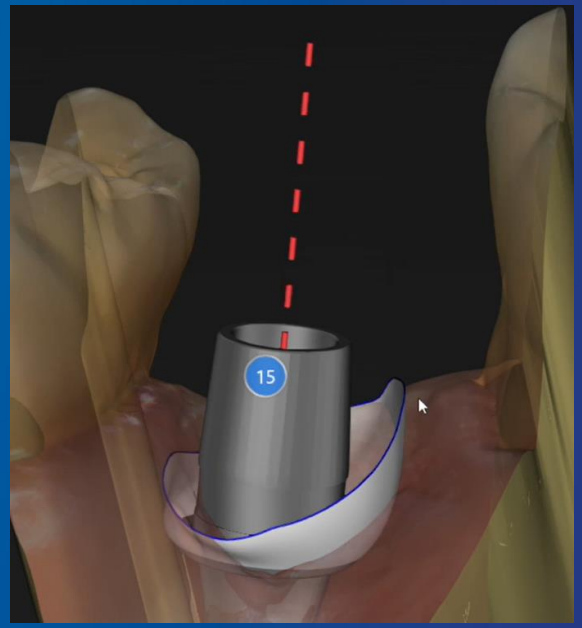




The scans are being prepared similar to an analog manufacturing, and the insertion axis needs to be defined. These are crucial steps for a proper initial proposal.

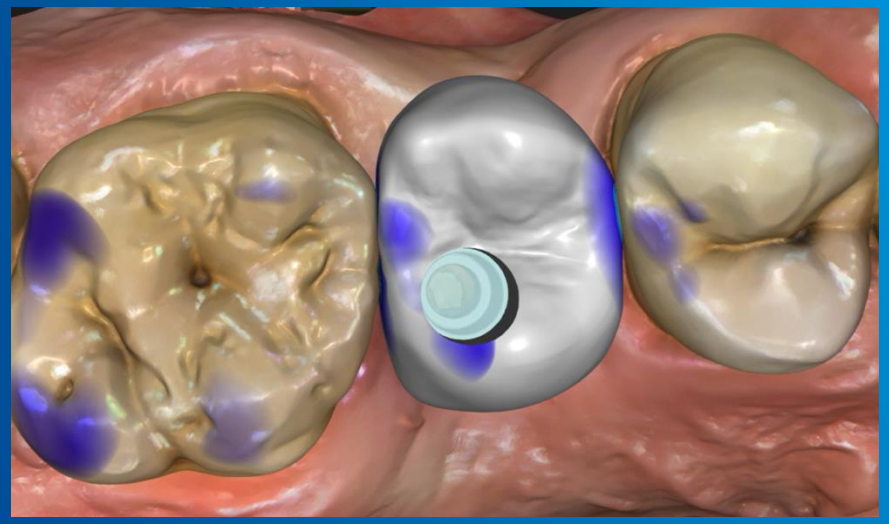
After that, the crown can be optimally designed and milled, whether in-house or in the cooperating lab.

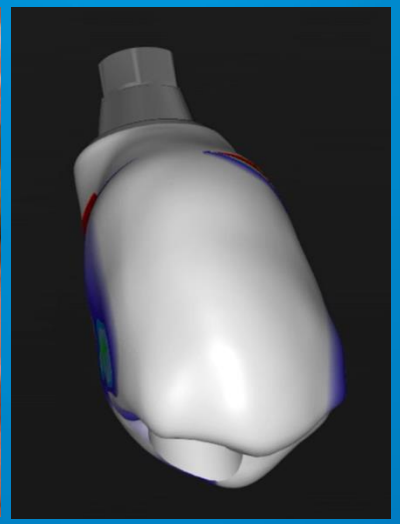


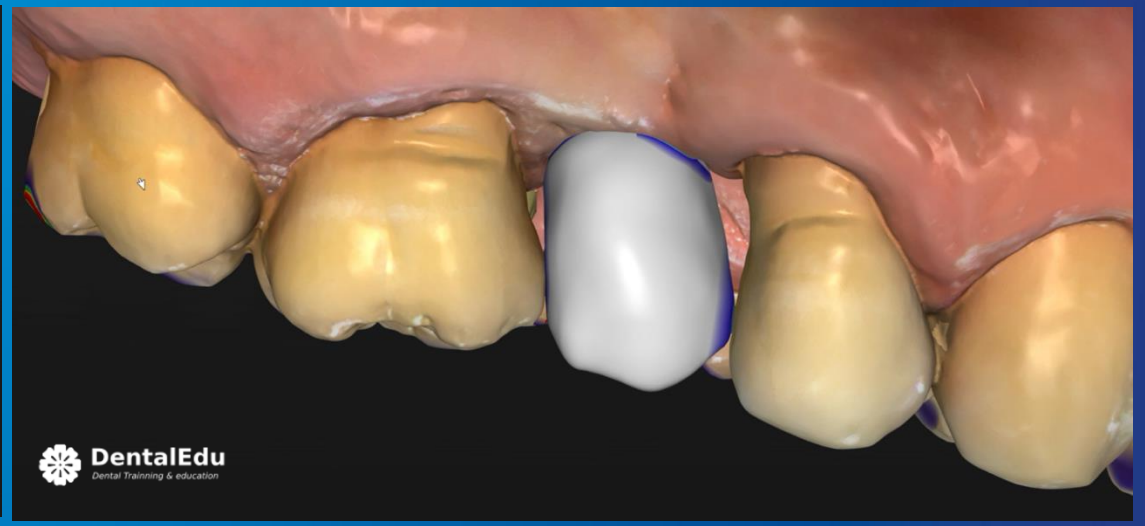


The design of implant crowns need to be fully adapted to the designated (or expected) emergence profile.

When in compromised sites (like the one presented, with a buccal soft-tissue loss and a patient choosing to avoid augmenting procedures), the supra-crestal part has to be adequatly designed.



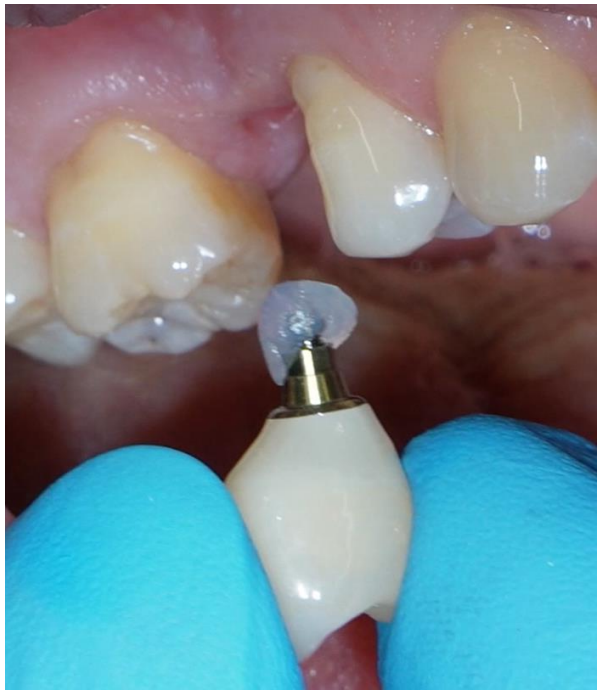




In this case the right amount of space for the mucosal part to evolve is in perfect balance with the needed pressure to sculpt and support it.

Once the Crown is ready, it is extraorally cemented to the C-Base, the excess removed. The implant crown is being torqued with the designated values intraorally (for the implant used in this case 30Ncm). The screw head is covered with teflon, whereas the access channel is filled with composite.

Note: the torque is defined by the abutment used



C-Base®

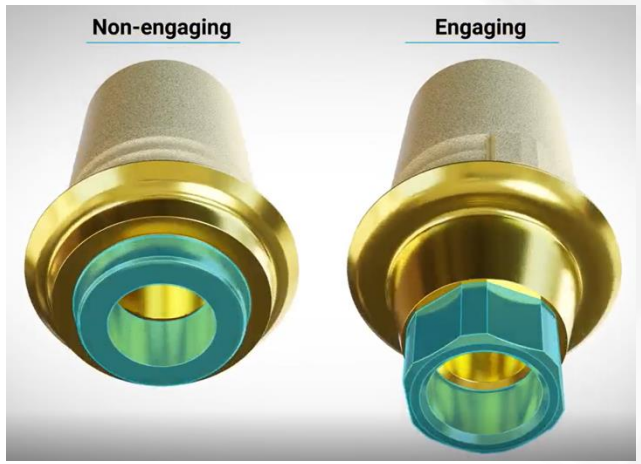
DESS ref. 58.XXX non-engaging - 59.XXX engaging

The most comprehensive solution compatible with the Cerec® Sirona® system

Manufactured in Titanium Grade V ELI

Screw included, same as implant brand manufacturer

Compatible with 15 implant systems



TECHNICAL INFORMATION

- Titanium Grade V ELI 23
- Gold anodized surface
- SelectGrip® surface treatment
- Two versions: engaging and non-engaging
- Tipically a cementing surface of 56,60mm²
- Shaft height of 4,68mm
- Combined with our free libraries for Exocad®, 3Shape®, Dental wings® and Blenderfordental®
- CE: Class IIb
- FDA: Class II

FEATURES

- Pure Switch® concept
- Multiple gingival heights options: 0,3-3,0mm depending on the system
- Screw included - same screw design as OEM
- Same Sirona Ti-Base design and shape

CLINICAL BENEFITS

- SelectGrip® surface treatment: 5x better cement retention
- Warmer gingival tone in case of gingival retraction

15 SYSTEMS

- NOBELACTIVE® & NOBELREPLACE® CC
- NOBEL REPLACE SELECT™
- NOBEL BRÅNEMARK®
- 3i OSSEOTITE®
- 3i CERTAIN®
- STRAUMANN® SOFT TISSUE LEVEL & synOcta®
- STRAUMANN® BONE LEVEL
- ZIMMER SCREW-VENT®
- ASTRA TECH IMPLANT SYSTEM™ EV
- ASTRA TECH OSSEOSPEED™
- DENTSPLY FRIADENT XiVE®
- DENTSPLY ANKYLOS® C/X
- OSSTEM® TS
- CONELOG®
- BIOHORIZONS® INTERNAL

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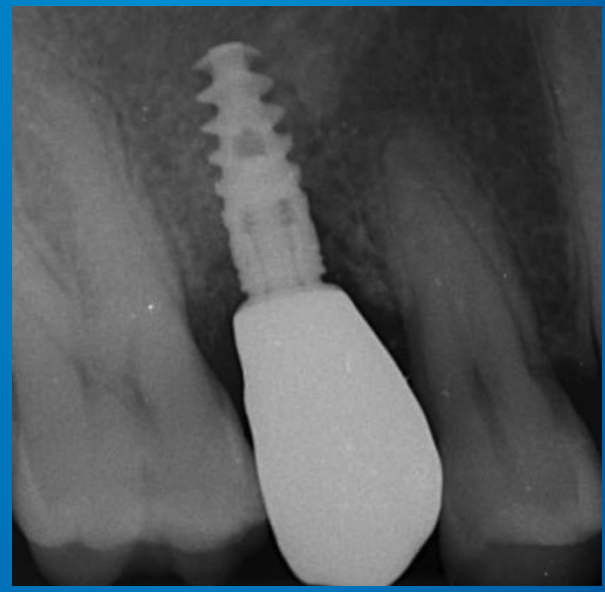
Conclusion

Anodized abutments lead to better biologic integration of implant crowns. Whenever possible, giving the extra space to the connective tissue (by using higher C-Bases) leads to a higher long-term stability. If the needed space is missing, equivalent consideration for the supra-crestal part need to be activated and performed.

In the case presented, a form alteration of the mesial premolar as well as an augmentation of the soft tissue could optimize the result.



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Dr. Konstantinos Tokmakidis

Switzerland

- **Degree in Dentistry (DDS) 1996-2003.** Ernst-Moritz- Arndt- University of Greifswald (Germany)
- **PHD (Dr. Med. Dent) in Implant Loading and Loading concepts with a "Magna Cum Laude" decoration 2004-2007.** Rwth Aachen University (Germany)
- **Post-Graduate Prosthetics Certification 2004-2008.** Rwth Aachen University (Germany)
- **Post-Graduate Certification in Implantology 2007-2009.** Rwth Aachen University (Germany)
- **MSC in Periodontology and Implant Therapy 2012-2014** University of Dresden (Germany)
- **Private Practice in Adligenswill, Lucerne.** Oral Implantology, Prosthetics and Aesthetic dentistry with an in-house lab.
- **Founder of DentalEdu:** Post-graduate dental education

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