NobelProcera® FCZ Implant Crown Clinical handling guidelines

Solution overview

The NobelProcera FCZ (full-contour zirconia) Implant Crown is comprised of a Zirconia "upper body part", a titanium adapter (which is the interface to the implant) and an Omnigrip Clinical Screw, identified by blue color-coding on the screw head.

Important: The Omnigrip Screw requires the use of the Omnigrip Screwdriver, identified by blue color-coding on the driver shaft. The Omnigrip Screws and Screwdriver are not compatible with the Unigrip System.



Surgical recommendation:

For an optimized esthetic outcome, have at least 3 mm between the buccal marginal mucosa and the implant interface.

Clinical procedure

- 1. Clean and sterilize* the FCZ Implant Crown prior to use.
- 2. Ensure that the adapter is securely attached to the FCZ Implant Crown, then insert the clinical screw into the FCZ Implant Crown and place the assembly onto the implant.
- **3.** Tighten the FCZ Implant Crown with the defined torque of **35 Ncm** using the Omnigrig Screwdriver and corresponding torque wrench.

Caution: Never exceed 35 Ncm prosthetic tightening torque for the abutment screw. Overtightening of the abutment may lead to screw fracture.

4. It is recommended to verify the final FCZ Implant Crown seating using appropriate means.

If it is necessary to remove the FCZ Implant Crown restoration from its seating in the oral environment, the FCZ Implant Crowns metal adapter may remain in the implant. If this occurs, the metal adapter can be removed with minimal force using the Nobel Biocare Abutment Retrieval Instrument Zirconia Conical Connection.

*Please refer for the full set of recommended parameters in "Cleaning & Sterilization Guidelines including MRI Information of Nobel Biocare Products" available at www.nobelbiocare.com/sterilization or request latest printed version from a Nobel Biocare representative.



Screw access hole closure

- Block-out the screw head (e.g. utilizing Teflon, Gutta-percha, cotton etc.) before closing the screw access hole with composite. This ensures that no composite closes the screw head, allowing an easy removal of the screw at any time.
- Close the screw access hole utilizing dental composite adhering to manufacturers bonding and curing guidelines.

Note: In a clinical situation with a very deep screw access channel, fill the channel within approximately 1.5mm of the opening with an appropriate material, followed by regular composite resin. This makes it easier to remove the seal at a later point, as the soft material can be removed with a probe.

 Re-polish if full-contour zirconia case is ground while adjusting composite thus to ensure a smooth surface of the full-contour zirconia.



Modifications

If adjustments are necessary: Make minor adjustments using diamond impregnated finishing tools with fine grit size, under low pressure and using copious water irrigation. Polish occlusal surface with any appropriate silicone polishing set intended for polishing zirconia occlusal surface. After adjustments are made, it is mandatory to polish the surface of the zirconia.

This should be done by using a rubber polishing set and following the four steps below:

- 1. Pre-polishing of the occlusal surface with a coarse ceramic polisher
- 2. Polishing of the occlusal surface with a medium-fine ceramic polisher
- 3. Polishing of the occlusal surface with a super-fine ceramic polisher
- **4.** Final high-shine polishing step, using diamond polishing paste and a suitable polishing brush to finalize the areas adjusted

Note: During regular checkups it is recommended to check the occlusion and adjust if needed (procedure described above). If the occlusal surface becomes dull (loss of gloss), it is important to repolish the occlusal surface, as described above.

Illustrations of above clinical steps are courtesy of Dr. Tristan Staas & Michiel Wouters.







