

STEP BY STEP GUIDE FULL ARCH SCREW RETAINED PROSTHESIS



Fig. 1

FIRST RESTORATIVE APPOINTMENT Open Tray Impression

Take an implant-level impression, including the palate and vestibules.



Fig. 2



Fig. 3

1. Remove the healing abutments from the implants (Fig. 1).
2. Seat the Non engaging Open Tray impression copings on the implants and tighten the screws (Fig. 2).
3. Take a radiograph to verify complete seating. Use a customized impression tray for the procedure ensuring no direct contact of tray with the impression copings.
4. Take an implant-level impression of the edentulous arch (Fig. 3). After allowing the material to set, loosen the long screws and remove the impression tray. Use only a hard setting medium viscosity monophase impression material. Could be a polyether or a PVS monophase. A putty wash PVS is not recommended for Implant impressions.
5. Replace the healing abutments.
6. After attaching implant analogs to the impression copings, hand tighten the long coping screws, verifying the interface is flush (Fig. 4).
7. Send in the case with a lab prescription that identifies the system and diameter of the implants.



Fig. 4

Note: If the implants are more than 2 mm subgingival, have screw access holes that are too far to the facial, or require an angle correction greater than 10 degrees, an abutment-level restoration is recommended.

SECOND RESTORATIVE APPOINTMENT

Verification Jig and Bite Rim



Fig. 5



Fig. 6

To ensure a passive fit of your restoration, it is vital to verify the accuracy of the impression and working model. You will receive an implant verification jig (IVJ) on a working model. This procedure should be followed to verify the accuracy of the final impression.

1. Remove the healing abutments from the implants.
2. Place the verification jig and confirm that it seats passively. Beginning with the most distal implant, place the first abutment screw. Hand-tighten the screw and make sure the prosthetic interface on all the remaining implants are completely seated.
3. Continue placing the abutment screws. Verify the fit each time a screw is placed. If at any point the verification jig lifts as a screw is tightened, this indicates the jig is not passive and needs to be sectioned in that area.
4. If any section has a cylinder-implant interface that is subgingival, a periapical radiograph should be taken to verify complete seating.
5. If the fit is not passive, then section the jig as necessary to create a passive fit and lute the sections together using Pattern Resin from GC or LC composite material (Fig. 5).

If the fit of the verification jig was passive without sectioning:

1. With the patient sitting up, use conventional denture techniques to achieve accurate jaw relation records (Fig. 6).
2. Take an impression of the opposing dentition and an impression of current denture for study model.
3. Select the shade and mold of the denture teeth. The study model for the patient's existing denture can be used as a reference regarding the size and shape of the new teeth.
4. Return the case to Katara Dental with the master model, bite rim, bite registration, opposing impression and study model.

However, if the verification jig needed sectioning and luting, this indicates that the implant impression is not accurate and will therefore need to be redone.

Impression procedure

1. Fix the verification jig on the implants and hand tighten all long screws one by one.
2. Check for a passive fit of the Custom tray (no contact with jig or posts) prior to taking the impression (Fig. 7).
3. Use only a hard setting medium viscosity monophase impression material. Could be a polyether or a PVS monophase.
4. Inject impression material under and around the jig to capture the ridge and all anatomical landmarks as for a full denture including full vestibular extensions and the complete palate
5. Seat the filled impression tray ensuring the heads of the guide pins are exposed through the tray (Fig. 8).
6. Once the material has set, remove guide pins and then remove the impression
 - a. Note: the verification jig is picked-up in the impression. Inspect the impression for the required detail.
 - b. Reseat and tighten the healing abutments.

Send the impression back to Katara Dental for fabrication of a new master model and Bite Rim. The next restorative appointment will be for taking the JR records, teeth shade and mould selection as mentioned above.



Fig. 7



Fig. 8

THIRD RESTORATIVE APPOINTMENT

Setup Try In

You will receive a wax setup from Katara Dental.



Fig. 9

1. Remove the healing abutments.
2. Seat the wax setup (acrylic base with teeth in wax) in the patients' mouth.
3. Evaluate the VDO, CR, esthetics, shade, tooth arrangement, occlusion, phonetics and midline (Fig. 9).
4. If CR is incorrect, a new bite registration should be taken on the wax setup.
5. Send clinical photos with patient at rest and smiling.
6. Send in entire case, including the wax setup, opposing model, and lab prescription with reset instructions (if necessary). If a reset is necessary, new bite registration should also be taken.

FOURTH RESTORATIVE APPOINTMENT



Fig. 10



Fig. 11



Fig. 12

You will receive a teeth wax setup on a PMMA bar (in case of CZAR CAD CAM restorations) or on a Pattern Resin bar (in case of a Casted bar) for final review.

1. Remove the healing abutments.
2. Seat the PMMA bar wax setup (tighten abutment screws) in the patients' mouth (Fig. 10).
3. Evaluate the VDO, CR, esthetics, shade, tooth arrangement, occlusion, phonetics and midline (Fig. 11).
4. Send in entire case, including the PMMA bar wax setup, opposing model, and lab prescription with any further instructions (if necessary) (Fig. 12).

FINAL RESTORATIVE APPOINTMENT

Delivery of Final Prosthesis

You will receive the final prosthesis from Katara Dental.

1. Remove the healing abutments.
2. Seat the final prosthesis on the implants.
3. Hand tighten the prosthetic screws, alternating from one side to the other.
4. Tighten the screws to the appropriate torque per manufacturer instructions. Wait approximately 5 minutes and retorque the screws.
5. Confirm the occlusion. Make adjustments as necessary.
6. Place a small amount of cotton in the screw access holes and fill with light cure composite to block the access holes.



CZAR PFM Plus screw retained
with gum tissue characterization



U/L CZAR Ti-Hybrid Denture
acrylic teeth



CZAR Ti-PaMalo Bridge
with cementable crowns



CZAR Ti-PaMalo with crowns in position
with gum tissue characterization

Note: The same steps apply to CZAR PFM Plus (screw retained) CZAR Ti-PaMalo, CZAR Ti-Hybrid or any other type of screw retained prosthesis.

This document has been created in collaboration by Dr. Udatta Kher and Katara Dental. The information contained in this document is the sole property of Dr. Udatta Kher and Katara Dental and may not be used without their express consent.

QUICK REFERENCE GUIDE FOR FULL ARCH SCREW RETAINED PROSTHESIS

	Clinician	Katara Dental
First Appointment	Open tray implant level impression	Fabricate working model, implant verification Jig and Bite Rim
Second Appointment	Check accuracy of verification Jig JR records and occluding model selection of teeth shade / mould existing denture study model	Articulate models and setting teeth in wax
Third Appointment	Wax setup try in	CAD design bar, mill bar in PMMA and transfer teeth setup on PMMA bar
Fourth Appointment	Final try in and review of Hybrid Prosthesis	Mill bar in titanium, Transfer teeth setup, Acrylize, Finishing and Polishing
Final Appointment	Final prosthetic delivery	