cement-retained crown using a PEEK temporary abutment
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Use this technique for the fabrication of short term (30 days), cement-retained single or multi unit temporary restorations. Temporaries may be used at the time of surgery, uncovery, or following an implant-level impression.

1. Remove the healing abutment
   Remove the healing abutment using an .050” (1.25mm) hex driver. Make sure the prosthetic platform is free of bone and soft tissue.

2. Seat the PEEK abutment
   Seat the plastic temporary abutment, engaging the hex of the implant. Hand tighten the abutment screw using an .050” (1.25mm) hex driver.

3. Mark the abutment
   Evaluate inter-occlusal dimensions, angulation, and tissue contour. Mark the abutment for the required vertical reduction and gingival contour.

   Important: Maintain at least 3mm of abutment height to avoid damaging the abutment screw.

component options
- PEEK temporary abutment
- .050” (1.25mm) hex driver
- torque wrench
- abutment prepping handle
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4 Modify the abutment

Remove the marked plastic abutment from the model and place it on the abutment prepping handle using an .050” (1.25mm) hex driver and hand tighten. Modify the abutment for vertical clearance and gingival margins using a carbide or acrylic bur.

Note:
Replace the healing abutment immediately to prevent soft tissue collapse over the implant.

5 Seat the modified plastic abutment

Verify the implant prosthetic platform is free of bone and soft tissue. Irrigate the internally-threaded connection of the implant and dry. Place the modified plastic abutment and abutment screw onto the implant using an .050” (1.25mm) hex driver and hand tighten. Take a radiograph along the long axis of the implant to ensure the abutment is seated completely onto the implant.

Note:
The X-ray tube must be positioned perpendicular to the implant prosthetic platform.

6 Tighten the abutment screw

Tighten the abutment screws to 30 Ncm using a calibrated torque wrench and an .050” (1.25) hex driver. Apply counter-torque by grasping the abutment using an abutment clamp.

Note:
Tightening the abutment screw to 30 Ncm is not recommended if the temporary is placed at the time of surgery.
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7. **Block the screw access hole**

Place a resilient material of choice (gutta-percha, silicone or temporary filling material) into the screw access hole and fill the remaining channel with composite or another material of choice. This allows for easy access to the abutment screw in the future.

Apply a separating solution onto the plastic abutment in preparation for fabricating the temporary crown.

8. **Try-in the shell crown**

Try-in the appropriate poly-carbonate/shell crown and modify as needed following conventional procedures.

9. **Fill the shell crown**

Mix acrylic or another material of choice, place inside the shell crown and position the crown over the plastic abutment. Withdraw the relined shell crown and remove the excess acrylic and polish. Try in the temporary crown to confirm fit and contour. Modify as necessary and polish after making adjustments.
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10 Deliver the temporary

Clean the separating solution from the prepared plastic abutment. Place the temporary restoration onto the abutment prior to cementation. Check the occlusion and contacts. There should only be light contact in centric occlusion and no contact in lateral excursions. Modify as necessary and polish after making adjustments.

⚠️ Important:
Cement the crown following the crown cementation technique module.

Take an x-ray for temporary prosthesis delivery records.