Cementation Protocol for Reverse Margin™ Custom Abutment-Prosthesis Installation by Dentists – March 25, 2019

Authorized Lab - For individual abutments with Reverse Margin (RM) custom abutments and prosthetics. Lab uses appropriate cement space to compensate for Estimated Prosthesis Dimensional Error. 80 microns for Single Crown or 3-unit Bridge.


Fig 1

The Lab estimates RM margin position to be equigingival or no more than ½ mm subgingival. If the dentist wishes more precise control of margin position, it is recommended that they use a RM custom healing abutment to shape the gingiva prior to taking the final impression.

The Lab sends the cleaned and sterilized RM products and sanitized models to the Dentist. The buccal aspects of the abutments are marked with a dimple and the lingual of the crowns are marked with marker. The zirconia abutment shapes are often milled from the same zirconia block as the prosthesis and luted to titanium bases unique to their implant retainers. Fig 1

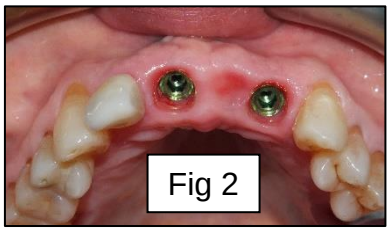
Fig 2

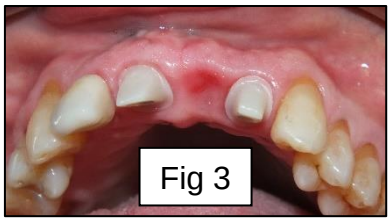
Fig 3

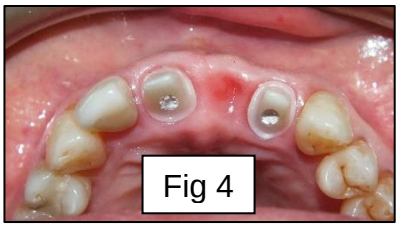
Fig 4


Fig 5

1. Remove cover-screw or RM healing abutment. Fig 2
2. Screw-in custom abutment. Local anaesthetic can be used for patient comfort. The tissues will blanch, and there are times when the tissues need to be released to allow for seating of abutment. Fig 3
3. Confirm seating of abutments with x-ray imaging.
4. Take a picture of the top of the abutment to record the position of the screw access channel openings, in case the abutment screw needs to be managed at some later date.
5. Try-in prosthesis and adjust contacts as necessary. The crown margins are somewhat self-centering within the abutment confines.
6. Torque the abutment screw according to manufacturers' recommendations. Retorque abutment screws again after 10 minutes.
7. Fill abutment screw access holes with rolled and condensed Teflon tape. Seal access hole top with a thin layer of flowable acrylic, when necessary to prevent contamination with saliva. Fig 4
8. Use small brush with petroleum jelly to lubricate supramarginal contours of prosthesis, gingiva and teeth to allow for easier removal of excess cement. Fig 5
9. Fill ½ of the intaglio of the crown with cement, beginning from the deepest part of the crown, to prevent air entrapment. Also place a little cement onto any concavities on the abutment occlusal surface of the abutment to prevent air entrapment during the cementation procedure. Tap the crown into place and then press it firmly, while using light to partially harden the excess cement. I am currently using RelyX Unicem (3M Espe). Fig 6

10. Use a small straight carver and controlled pressure to break away excess cement. This process is usually fast, and the cement breaks off in chunks. Fig 7
11. Use the straight carver to press against the occlusal shoulder of the RM margin to remove or polish away residual cement.
12. Adjust occlusion as necessary. There is often very little to adjust, as the crown is self-levelling and it does not get hung up on the incline plains of its retainer. Fig 8
13. Take x-rays to confirm the are no visible problems with your installation. Fig 9

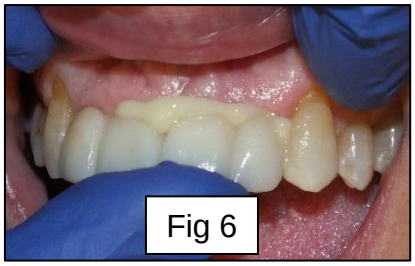
Fig 6

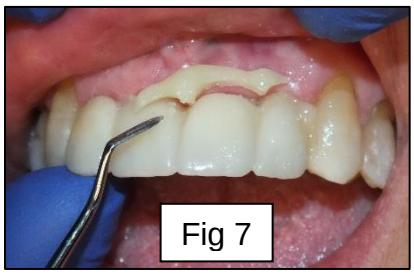
Fig 7


Fig 8

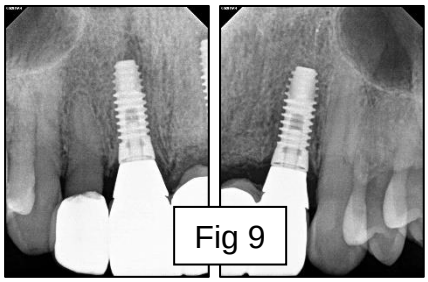
Fig 9


Fig 10

At the end of this installation you have accomplished many amazing things that promise to benefit your patient and you, the dentist.

Unlike the current Screw-in technique, you are now able to consistently optimize the implant abutment fit. You have also avoided the need to leave your patient with a plastic screw hole access cover, that may require maintenance.

Unlike the current cement-in technique, you have prevented cement from going past your abutment margin and have prevented the occurrence of overhanging, overextended and open margins. Indeed, you have improved access to the margin area of your prosthesis for monitoring and maintenance.

Both you and your patients have more to smile about, as you have reduced their risk factors for complications. Preventing complications will save them from unnecessary expensive and uncomfortable experiences and will save you from dealing with difficult to correct problems. This is a win-win scenario. An ounce of prevention is still worth a pound of cure. Figs 10&11

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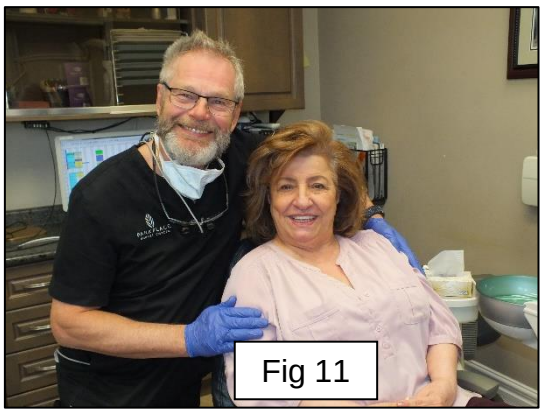
Fig 11

Dr. Svoboda has placed and restored thousands of dental implants over the last 25 years. He has researched implant prosthesis installation extensively and has developed the Reverse Margin™ products to specifically mitigate the root causes of installation related complications. He likes to work with people that are interested in making implant treatment better for patients. He cares about his patients, and they care about him.