

TIPS FROM OUR READERS

A technique to remove polymerized excess resin cement from interproximal regions following bonding of porcelain laminate veneers

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Successful and long-lasting outcomes of porcelain laminate veneers (PLVs) depend on technique-sensitive bonding protocols,^{1,2} and the removal of excess resin cement from the margins and interproximal areas of the PLV is essential. Different methods have been described for excess cement removal, including dental floss, interproximal strips, interproximal brushes, surgical blades, matrix bands, and nylon ligatures.²⁻⁶ However, overly aggressive removal of the excess cement from interproximal surfaces before complete polymerization may cause PLV dislodgement. Therefore, this article describes an effective technique using a modified matrix band and an orthodontic interproximal reduction (IPR) instrument to remove excess resin cement from the interproximal regions of PLVs after complete polymerization of the resin cement.

TECHNIQUE

1. Create scallop-shaped cuts in a 0.001-inch circumferential matrix band (Tofflemire Universal; Miltex-Integra) using a high-speed handpiece and diamond rotary instrument (852F; JOTA AG) (Fig. 1).
2. Attach the modified matrix band to an orthodontic IPR instrument (Contouring Kit- Handle; Ortho Organizers) by making 2 holes on either side of the scallop-shaped cuts at a length slightly shorter than

the instrument's attachment pins. Autoclave the instrument before use.

3. Follow the manufacturer's instructions to prepare the veneer and tooth surface before cementation.
4. Load the veneer with resin-luting cement (Variolink LC; Ivoclar AG) and seat the veneer with gentle finger pressure. Remove any excess soft, unpolymerized luting composite resin from the margins by using a microbrush (original microbrush; GC Corporation) and gauze.
5. Tack polymerize the cement at the margins for 1 to 2 seconds with a light-emitting diode (LED) visible light-polymerizing unit (Bluephase PowerCure; Ivoclar AG). Use an explorer to remove the excess cement from the facial and incisal margins of the restoration.
6. Completely polymerize the resin luting agent using an LED visible light-polymerizing unit. Use a #12 scalpel blade or a sharp curette (Columbia 4R/4L; Hu-Friedy) to remove the residual cement on the PLV facial and incisal surface.
7. Remove excess cement in the interproximal areas by using the modified matrix band attached to the IPR handle in a sawing motion. The scallop-shaped sharp surfaces will cut through any remaining polymerized cement at this stage (Fig. 2).
8. Ensure complete removal by using floss to check for remaining cement and repeat step 7 if required.

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Figure 1. Scallop-shaped cuts created in circumferential Tofflemire matrix band.



Figure 2. Excess polymerized cement in interproximal area removed using modified matrix band attached to orthodontic interproximal reduction (IPR) instrument handle.

SUMMARY

Although removal of excess luting cement may be achieved on the facial and incisal surfaces of PLVs by using a microbrush, an explorer, or a scalpel, clinicians may find it challenging to completely remove the excess polymerized resin cement from the interproximal margins. The modified instrument presented in this article will not damage the tooth or the ceramic restoration while removing any excess polymerized resin cement and can be used with or without the handle. However, care must be taken to avoid inadvertent injury to the lips and interdental papilla.

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