

## Clinical benefits of 4-META/MMA-TBB resin cement comparing with composite resin cements

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In recent years, the improvement of dental adhesion has made it possible to achieve esthetic and reliable clinical outcomes using ceramics and CAD/CAM composites as a restorative treatment modality including laminate veneers, RBFDPs and overlays. Although composite resin cements are commonly used to deliver those restorations, they have a bonding difficulty to the restorations, especially CAD/CAM composite restorations. The bonding of composite resin cement relies on micro mechanical retention and chemical bond to silanated ceramic fillers but not on the matrix resin. Surface areas of exposed filler on the surface of CAD/CAM composite restoration are not as great as that of the matrix resin. Therefore, the usage of an acrylic resin cement should be considered as it possesses better potential of monomer infiltration into resin matrix of the CAD/CAM composite due to its low molecular size. This fact means acrylic resin cement is more favorable than composite resin cement for delivering CAD/CAM composite restorations.

The 4-META/MMA-TBB resin cement (Super-Bond®, Sun Medical, Shiga JAPAN) has been used worldwide for 40 years because of its remarkable bond strength to both of tooth structures and restorations, distinct physical and mechanical properties, and excellent biocompatibility. In this session, the author presents the avenue to maximize the efficacy of 4-META/MMA-TBB resin cement by showing clinical cases.

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2004	Doctor of Dental Surgery (DDS)
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