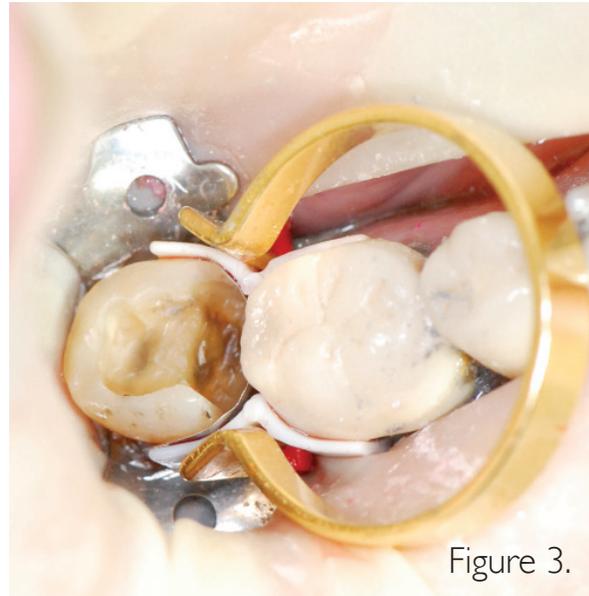




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The Difficult Class II Composite Restoration

Every month in almost every journal sent to restorative dentists you will find an article on the restoration of the class II lesion. They all describe and demonstrate how to eliminate sensitivity, minimize shrinkage or obtain the ideal flossable tight contact. This article will demonstrate through two case studies how to restore the difficult wide open class II composite restoration (fig. 1).

We all want to know how to restore the tooth with a large failing restoration with a wide interproximal box or worse a fractured cusp. In the past if the preparation wasn't ideal the tooth received a crown because it was impossible to create the natural contours and tight contacts to bring it back to normal function.

Dr. Ross Nash in his recent article on the increasing demand for aesthetic posterior restorations describes how to restore the class II restoration using sectional bands, a wedge and a separating ring that goes over the wedge. This works really well with conservative lesions but I spend half my time

restoring failed amalgams with open contacts or fractured cusps. Patients can't always afford that crown or in many cases a composite restoration is a more conservative procedure. According to Dr. Patricia Manarte Monteiro et. al. "resin based composite materials are effective in class II clinical situations."

I will demonstrate using two case studies how to restore the difficult tooth with posterior composite utilizing the ABC Wedge (A better contact wedge) manufactured by Danville Materials in California. ABC Wedges were designed to work in pairs, maintain the normal contours of the tooth, establish broad tight contacts and work with all the currently available separating ring systems.

My first patient is 55 years old, a self employed male with no dental insurance. He presents with a failing amalgam in a lower second molar and can not afford a crown at this time. Upon removal of the old restoration and decay it was decided to restore this tooth with a posterior composite material utilizing the ABC Wedge.

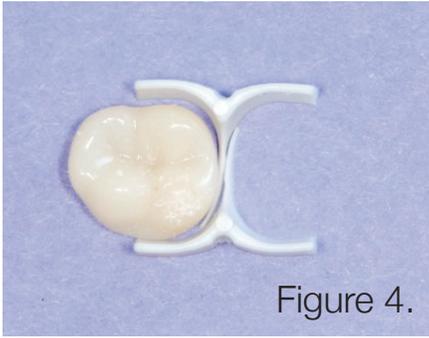


Figure 4.

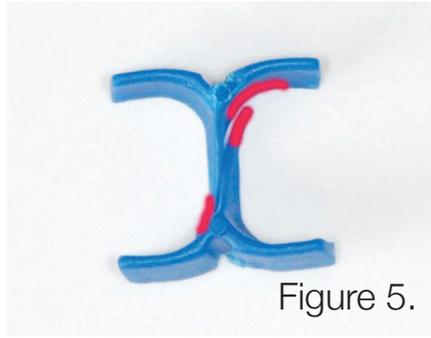


Figure 5.



Figure 6.

The ABC Wedge with a little imagination looks like an elephants head and I will describe it's parts as such. (fig.2) The ears were designed to support the sectional band in three dimensions and prevent the sectional rings from crushing in the matrix band. Two wedges are utilized from the buccal and lingual and the curved trunks slide past each other sealing off the gingival floor. (fig.3) A central groove is located on the back between the ears to line up the sectional separating ring and directs the forces interproximally for maximum separation. (fig.4 and fig.5) The tooth was easily restored in incremental layers, trimmed back and bite adjusted.

The second patient is a senior citizen with a lost filling in tooth # 29, the lower second bicuspid, opposing a full upper denture. (fig.6) Due to her age, complicated medical history and occlusion against a denture it was decided to restore this tooth with a posterior composite. Once again the ABC Wedge was utilized to prevent the separating ring from crushing in the matrix, provide anatomic contours and avoid fracture of the lingual wall when placing the separating ring. In this clinical situation the grove behind the ears not only directs the pressure between the teeth but it also secures the ring and prevents it from popping off the tooth. (fig. 7) This tooth was also restored with a posterior composite following the manufacturers guidelines, trimmed and occlusion adjusted.

This technique addresses many of the issues involved in restoring the large class II lesion. Larger MOD restorations and teeth missing a cusp can easily be restored using the ABC Wedge. (fig 8) It's so easy it can be used with the Tofflemire contoured band without the retainer. (fig. 9) When the entire lingual is missing a continuous band is easier to place rather than two small sectionals and the ears will stabilize and hold the band in place. Separating rings are placed and the tooth restored with a posterior composite.

I believe the ABC Wedge with a little imagination can be used to restore rotated teeth and because they are available in various sizes, mixed and matched up to fit any embrasure. Since they can be trimmed and modified with a scissor or bur they can be used for all class II applications.



Figure 7.

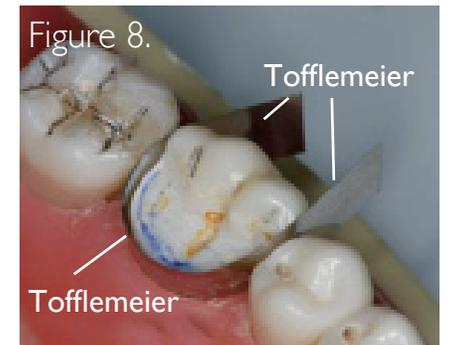


Figure 8.



Figure 9.