Establishing Bulk Fill Composite in Your Direct Restorative Procedure

By Dr Jeff Blank, USA

Over the last decade, the science and technology of composite materials have been advancing at a rapid rate. Today’s materials help me perform better dentistry and allow me to do it more efficiently than ever, which is extremely important for my busy practice. I see a large part of my day is spent doing composite dentistry, so I need products that work quickly.

The products I have in my armamentarium have been chosen carefully and were chosen based on significant research. I don’t want to use something on a patient that could cause issues later just because I didn’t do my due diligence.

With my current mix of materials and products, I can perform procedures that I wouldn’t have attempted years ago, or at least would have struggled through!

The Advancement of Bulk Fills

There has long been a quest for a “white amalgam” in dentistry. Many dentists like to use amalgam because it’s easy to place and can last extremely long, but patients don’t like it because it doesn’t offer the esthetics of a composite. In the early 90s, bulk fill composites began entering the market, and in my opinion, the properties of these materials were not up to par.

Today’s bulk fill materials have evolved to provide clinicians a fast and easy option for deep cavities and take away the tedious work required for incremental layering. With these advancements, the likelihood of voids can be reduced, and the amount of shrinkage can be reduced, which makes bulk fill composites very appealing to me.

My go-to bulk fill is Filtek™ Bulk Fill Posterior Restorative, and I can honestly say it’s been a game changer in my practice. This material works extremely well and has been experiencing with bulk fills, I thought this would be a good option in this situation. These photos catalog the procedure completed on tooth #4, but the exact same treatment was done on tooth #14 immediately following.

Step 1

Initial access was made on tooth #13 (Fig. 2). Upon initial access, the extent of the decay became clear, and additional decay was removed to create the final preparation of 5mm. The preparation was then selectively etched (Fig. 2), Scotchbond™ Universal Etchant, and after 15 seconds the etchant gel was rinsed off and dried.

Step 2

Single Bond Universal Adhesive was applied to the preparation and cured for 20 seconds (Fig. 3). The adhesive was then air dried for 5 seconds and light cured 10 seconds.

Step 3

Filtik Bulk Fill Posterior was then placed in the preparation up to 5mm (Fig. 4). Tip of the composite was placed in the interproximal box and slowly raised while material was dispensed (Fig. 5). The composite was packed with an instrument to adapt to the preparation wall and floor (Fig. 6). The composite was then light cured.

Step 4

Initial contouring was completed with a diamond bur to blend the composite with the surrounding dentin (Fig. 7). Sof-Lex™ Spiral Finishing and Polishing Wheels were then used. The large wheel removed initial surface scratches (Fig. 8) and the white wheel provided a final polish (Fig. 9). The final restoration was completed (Fig. 10).

By 3M

On 22-25 March 3M Oral Care participated in one of the leading trade fairs of the dental industry - IDS 2017, Cologne. During the five days of the show the booth was visited by the large number of doctors of various specialties coming from various countries from all across the globe.

The main theme of the booth was dedication to Science Applied to Life concept and dentists could get acquainted with the new products and technologies in various dedicated areas. In the Direct Procedure section Eththic and Efficient procedures with Filtek™-nano-composite restorative materials were presented and Efficient procedures with various dedicated areas. In the Indirect Procedures in a three-dimensional simulation of Direct and Indirect Procedures could learn more about the Gray Market issue, why they should pay attention to this topic, which problems can be caused by using gray market products, how to ensure buying products from 3M authorized distribution channels to prevent Gray Market and Counterfeit Product Risks.

And after the busy days visitors could relax in a comfortable lounge meeting their colleagues from various countries and having discussions on the new products and technologies.

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