Balancing Efficiency and Esthetics – Maximizing Today’s Modern Materials

By Dr. Cory Glenn, DDS, USA

As many dentists in busy practices may know, being efficient during each procedure is a key to success on a day-to-day basis. I continually strive to hone my skills to make procedures faster and better, and a major part of my ability to do this is my product mix. And although efficiency is extremely important to me, I also choose a set of products even if they offer great efficiency, if the end result becomes compromised.

A large part of my practice is performing direct posterior restorations, which can often become time consuming, for me the need for multiple steps and composite multiple layers. Over the years I’ve been incrementally placing composites with great results, but I wanted something easier for my posterior restorations. To make restorations simpler, I began researching new products marketing themselves as efficient and esthetic. I’m not the type to simply switch everything to one new product without ample research and science backing up the product, so I began testing a select group of products I thought would work well.

I began experimenting with a new adhesive, a new composite material, a new cutting light, and a new finishing and polishing system. After the first few restorations I began achieving great results quickly and easily.

Characteristics of Adhesive

Universal adhesives have been available for several years and their goal is to be exactly what they say: universal. In most cases, there’s no need for multiple bottles for different indications and most can be used in self, selective, and total etch mode. After some initial research and talking with colleagues I began trying Single Bond Universal Adhesive. In order to lessen the risk of using a new product, I began using it for a few procedures at first to gauge its performance and kept my old adhesive on standby.

Finding the Right Bulk Fill

I’ve been intrigued with the advent of bulk fill composite in the last few years and their ability to be placed for multiple bottles for different areas dentists could learn more about Esthetic Procedure Solution with Filtek™ Bulk Fill Posterior Restorative designed to perform all disciplines of dentistry with zero chair time. It has excellent handling characteristics and quick, which in the end saves me time.

When I tested Filtek™ Bulk Fill Posterior Restorative, I saw many characteristics and results that I liked. A large concern I had with these composites was the amount of polymerization stress that acts on the tooth, but research shows that Filtek Bulk Fill Posterior offers stress relief compared to many incremental fillings, which is great for my peace of mind. The esthetics of this material has also been pleasantly surprising to me. With Filtek Bulk Fill Posterior I can improve productivity and save valuable chair time. It has excellent handling like the traditional Filtek materials I use and is easy to shape.

I now have several minutes left after a restoration where I can quickly look over case notes or take a short mental break before the next patient. It’s great not rushing from one restoration to another, and it really seems to create space in my day.

The Importance of Proper Curing

Not all curing lights are created equal. New LED models can produce higher light output and can cure materials more efficiently than previous types of lights while also making user operation easier. I’ve been experimenting with the Elipar™ DeepCure-5 LED Curing Light and have found great success with it. It increases my confidence of a full cure at the bottom of the proximal box and has an ergonomic shape which makes operation easier by me or my assistants. With old and inefficient curing lights, I would sometimes worry about achieving a reliable result and that’s not the case with this new curing light.

Simple Finishing and Polishing

Finishing and polishing a restoration can mean the difference between a life-like shine and a dull looking restoration. Switching between the traditional points, cups and discs polishing can be tedious and time-consuming for me. I’ve been utilizing the Sof-Lex™ Spiral Finishing and Polishing Wheels* and have seen great esthetic results. With this two wheel system, I simply run each wheel over the restoration to polish and finish. I find it to be extremely quick, which in the end saves me time.

Case Study

The first case I chose to work on was a single tooth in the maxillary right lateral incisor with a direct posterior restoration. As the preparation was less than 4mm deep, Filtek Bulk Fill Posterior Restorative was selected.

Step 1

As the preparation is less than 4mm deep, Filtek Bulk Fill Posterior Restorative is placed in one step. (Fig. 6) A more detailed shaping and contouring of the composite is then done with a metal instrument (Fig. 7). The composite is then light cured for 20 seconds (Fig. 8).

Step 2

The preparations are selectively etched (Figs. 9) with Scotchbond™ Universal Etchant Gel and Single Bond Universal Adhesive is rubbed into the surface for 20 seconds (Fig. 4). The adhesive is then gently air dried for 5 seconds (until the adhesive doesn’t move) to evaporate the solvents, and it’s light cured for 10 seconds (Fig. 5)

Step 3

After adjustment using a finishing bur, the final polishing is completed with the Sof-Lex Spiral Finishing and Polishing Wheels. The bevel finishing wheel (Fig. 9) is used first to remove surface scratches and the white polishing wheel (Fig. 10) is used to create a high shine. The composite restorations are complete (Fig. 11).

3M Oral Care Solutions at AEEDC, 2017

By 3M

On 7-9 February 2017 3M Oral Care took part in the AEEDC, one of the largest regional trade shows for oral care professionals in the MENA Region. During the 3M booth was attended by visitors from various countries across the Region and participated with vast procedure solutions for greater clinical, professional and personal success.

In the Direct Restorative Procedure Solution with Filtek™ Bulk Fill Posterior Restorative designed to perform all disciplines of dentistry with zero chair time. It has excellent handling characteristics and quick, which in the end saves me time.

3M Oral Care products please visit: www.3moralcare.com/mpe

*Replaced with the new Sof-Lex™ Diamond Polishing system consisting of two new wheels: pre-polishing spiral (beige) and diamond impregnated polishing spiral (pink) in 2016.