Dr. George Freedman, Canada

In this new section of Dental Tribune, Dr. Freedman gives you a brief summary of products that have been introduced into the field of dentistry. His perspective is based on actual use of the products in his private clinical practice.

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Venus Microhybrid with Color Adaptive Matrix · Heraeus Kulzer

The microhybrid composite is the universal restorative for anterior and posterior cavity preparations. This places heavy burdens upon the material, it has to be strong enough to resist posterior occlusal forces and it has to be aesthetic enough to perfectly blend anterior restorations. Heraeus has had an excellent history with chameleon-like composite materials—Charisma has been available for more than a decade. Venus, the newest microhybrid from Heraeus Kulzer has a proprietary color adaptive matrix system that optimizes the refractive indices of the matrix and the fillers such that margins can virtually disappear. This makes shade selection and polishing of restorations much less technique sensitive, and much more rapid. The 27 shades and translucency of Venus create life-like restorations that readily match tooth coloration with a great deal of “forgiveness.” The shade guide is an intuitive two-layer cookbook that incorporates real composite shade tabs (rather than acrylics or ceramics) eliminating color matching inaccuracies. Truly creative aesthetic dentistry has never been so easy. Venus does not stick to placement instruments and has very good handling properties including minimum slumping. Thus, contouring and shaping of the final restoration is relatively straightforward. Venus has great strength and excellent wear resistance for long-lasting restorations that maintain their surface finish. Over the past few years, we have tended to use 7th generation adhesives—single bottle, single step adhesives that etch, prime, bond, and seal the tooth surface without any postoperative sensitivity. Using Venus with 7th generation Gluma-containing ibond (also from Heraeus Kulzer) simplifies the restorative process and makes it more predictable, as well as faster. Venus and ibond were very easy to adapt into my practice. They have made my clinical practice faster, better, and easier.

Liberator · Miltex, Inc.

For years, our rotary endodontic files have had traditional helical flutes. These files can, under certain circumstances, self-thread into the canal. The manufacturing process for helical files can also leave micro-cracks perpendicular to the axis of the file itself, possibly contributing to post-treatment symptoms. Years of clinical research and input from leading endodontic clinicians has led to the development of innovative file designs. The recently introduced Liberator NITI Endodontic files from Miltex are manufactured incorporating a straight flute design that cannot thread into the canal, and one that eliminates the perpendicular micro-cracks. Liberator files are used at 1,000–2,000 rpm (compared to conventional rotary files at 500 rpm). The Liberator cuts dentin considerably faster and provides an improved tactile feel within the canals. The higher rotational speed removes debris from within the canal more effectively as well. The triangular cross section of the file provides sharp cutting edges that reduce the torque demand on the instrument. An essential feature in the Soane safety tip that has been designed to minimize lodging and transportation. It also tends to keep the Liberator files centered in the canal. Further, since the Liberator files do not self thread, Resilon, gutta percha points, and other obturation materials can be more easily recovered from the canals. During use, the Liberator files must be advanced into the tooth with just enough pressure to make progress down the canal; since there is no possibility of self-threading, it is not necessary to employ the conventional pecking motions that are used with helical files. The Liberator file cuts with heightened safety, control, and efficiency. Endodontics can be fun!

RONDOflex plus 560 · KaVo

Microabrasion has been available to the dental profession for more than half a century. Unfortunately, for many of those early years, the major drawback was that microabraded preparations were simply too finicky for use. It was in the early 1990’s that microabrasive preparation began to make a dramatic comeback in dentistry. Microabrasions can be used for the preparation of small cavities for restoration, but this is only a beginning. It is also very useful in opening and extending the fissures for sealants, removing deep caries and removing enamel that is discolored or affected by aluminum oxide (Al2O3) as blasting abrasive, together with additional water supply to minimize the dust cloud in the periphery without losing abrasive effectivity in addition to small carious defects and surface discolourations, and enamel that must be roughened for 6th generation adhesives. Ceramics can benefit from the increased surface bonding area that is provided by microabrasion. Composite repair is made more predictable by micabrading the pre-existing surface for additional adhesion. RONDOflex plus 560 is a practical and convenient tool that is always readily available.
THE LADDER

Dr. Steven Weinstein

The LADDER is a highly descriptive, visual pictorial display of digital images, offering comparative definition to-Ceramist and Ceramist-to-Dentist communication. The LADDER images depict an enhanced system of reference where both lab technician and classification of tooth morphology, that have been painstakingly crafted on laminated archival photographic paper. This allows for multiple re-productions of identical references so that every patient can see the whitening results after a single application. For complete whitening, however, multiple trays, used in separate applications, are indicated. I noticed that the TresWhite gel was flavorful (the first hydrogen peroxide bleach to actually have an acceptable taste), a definite plus in any bleaching treatment, and that the Opalescence TresWhite trays fit well. They are fast, and they are fun. Most importantly, they work quickly, effectively, and comfortably.

The single tooth crown/onlay is the most common indirect procedure in dentistry. In order to maintain our patients in-between the preparation and delivery appointments, good temporization materials are essential for both vital and non-vital teeth. The provisional restoration keeps adjacent teeth in place, preventing the slight drifting that can complicate cementation, and maintains the opposing dentition from super-erupting. LADDER was the original auto-mix provisional bis-acryl material. Over the years, it has simplified crown and bridge treatment tremendously. Now DMG has introduced Luxatemp with Fluorescence, offering natural fluorescence and reflectance in the temporary restoration that gives a patient pleasing natural look, including under dark or black light conditions. Luxatemp Fluorescence is a 10:1 auto-mixing provisional material, available in 5 shades. It has been designed to enhance patient comfort during polymerization, making removal of the tooth easy, and largely eliminating post-set marginal touch-ups. No exothermic heat build-up during polymerization eliminates patient discomfort. Since there are no liquid monomers, the taste and odor are neutral. The first provisional restoration is strong, and will last for a relatively long time. Luxatemp can be touched-up with composite; altering the shape, size and appearance as necessary. Even our patients have noticed a difference with Luxatemp Fluorescence; when they had pictures taken with their provisional, the teeth looked natural; the camera flash did not alter the color of their teeth making it seem that they had missing or discolored teeth. Luxatemp Fluorescence is an indication of the DMG’s efforts to improve the standard of provisional restorations. Luxatemp Fluorescence looks good, feels good, is functional and easy to fabricate, and most importantly, effectively takes the place of the missing natural tooth during the entire provisional phase.

Opalescence TresWhite

From time to time, a product that makes a quantum leap in the treatment process is introduced into the dental field. This type of a paradigm shift in dental thinking usually propels the entire profession into an innovative, more practical direction. The introduction of Opalescence TresWhite by Ultradent is such an innovation. The TresWhite bleaching system makes the at home bleaching process much simpler, much easier, and much more patient and dentist friendly by eliminating the need for impressions and models. The TresWhite system eliminates bleaching tray impressions, the pouring and trimming of stone models, the development of the reservoirs, and labtime. It offers a prefilled plastic tray that contains a thin, bleach loaded membrane that is easily adapted to the teeth through direct placement and adherence. The unique delivery system allows patients to place the carrying tray into their own mouths, and to immediately adapt the membrane to their own teeth for a very comfortable custom fit. TresWhite whitens all the teeth in an arch. TresWhite’s thin membrane custom tray is pre-loaded with two gels: an activator 9% hydrogen peroxide gel that actively whitens teeth for an hour or so, and a barrier gel that is designed to protect gingival tissues from the bleaching component. In my own mouth, I was able to see the whitening results after a single application. For complete whitening, however, multiple trays, used in separate applications, are indicated. I noticed that the TresWhite gel was flavored (the first hydrogen peroxide bleach to actually have an acceptable taste), a definite plus in any bleaching treatment, and that the Opalescence TresWhite trays fit well. They are fast, and they are fun. Most importantly, they work quickly, effectively, and comfortably.

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