NEW PRODUCT
reviews

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Vitalescence™ (Ultradent)

One of the nicest things about free-hand bonding is the fact that it grants us the ability to have absolute control over the final esthetic result of our composite restorations. Today’s composites present an expanded range of body shades and opacities as well as incisal shades that truly bring out the artistic side in each one of us. Composite resins have evolved to such a high level of excellence that their physical and esthetic properties even rival those of ceramic materials. When implemented according to a natural stratification protocol, composites allow the clinician to faithfully emulate the optics of dentin and enamel just as ceramics would allow a ceramist.

One such material that has recently been introduced is Vitalescence from Ultradent. Vitalescence is a Bis-GMA based microhybrid composite resin (average filler size .7 um), 75% filled by weight, and 52% filled by volume. The handling properties are quite good, presenting an above average sculptability with minimal stickiness. It is marketed for both anterior and posterior direct and indirect procedures.

The complete kit comes in a total of 26 shades (Figure 1). There are 18 dentin shades keyed to the Vita shade guide (A1, A2, A3, A3.5, A4, A5, A6, B1, B2, B3, B4, B5, C1, C2, C3, C4, C5, D3), and 8 enamel shades (Pearl Frost, Pearl Snow, Trans Gray, Trans Ice, Trans Mist, Trans Smoke, Trans Yellow, Trans Amber). The dentin shades match the Vita shade guide very closely and present quite a life-like fluorescence. Especially useful for the reproduction of higher chroma dentin areas are the A5, A6, B5, and C5 shades which are seldom found.
in other resin systems. The highly fluorescent enamel shades are unique in that they most closely resemble incisal shades due to their high translucency. Another peculiarity of the system relies on the fact that most of the polychromy of the final restoration is imparted by the underlying build-up comprised of dentin (body) shades. The enamel shades function mostly as modulators of value while still imparting some hue variation to the restoration. To reproduce the incisal halo while accentuating the varying degrees of opalescent effects, shades such as Trans Mist, Pearl Frost, and Pearl Snow work beautifully (Figures 2 and 3). In anterior cases, the manufacturer recommends placing a shell of Pearl Snow lingually to block out any shine through whenever tooth structure is missing on the lingual wall. Other more translucent shades such as Trans Gray and Trans Ice can be used to replicate the bluish hue reflected by the opalescent effect around the dentin mamelons.

Specifically designed for helping in the shade selection process is the VitaLecence Masters Shade Guide which is sold separately (Figure 4). This guide is comprised of 24 shade tabs made of the actual composite material and, due to their wedge shape, the approximate dentin and enamel thickness can be predetermined by overlapping and sliding the shade tabs back and forth (Figure 5).

Even though VitaLecence is supposed to confer both strength and a ‘high shine all in one system, it is OK to compose it with microfilled composites of varying opacities as the final layer, as well as tints and opaques for creating intrinsic shade variations, if you wish to intensify aspects such as polishability and polychromy. VitaLecence is available in Ultradent’s patented Quadraspense syringes neatly arranged in the tradi-
tional syringe organizer. Whereas the syringes present neither a different color nor any color coding apart from the stamped shades to differentiate between the dentin and enamel shades, their handles depict a subtle pearly and ivory color for the dentin and enamel shades respectively. Vitalescence is somewhat different from other composite resin systems and it demands a change of mind and intensive training in order for the peak of the learning curve to be reached. But, quoting the Spanish painter Jose Parramon, since "art is not subject to fixed rules", it is likely that you will rediscover some old artistic skills and unravel some new ones as you work with this artist oriented material.

**DAY WHITE™** *(Discus Dental)*

**“85% LESS WEAR TIME”**

This is how Discus Dental is advertising its new home bleaching gel based upon a survey that a great number of prospective patients prefer daytime to overnight bleaching.

Day White, the second product on the market to use hydrogen peroxide as a home bleach, is available in 5.5% and 7.5% hydrogen peroxide high viscosity gel (the equivalent of 15% and 22% carbamide peroxide, respectively). This new home bleaching product borrows the idea from in-office power bleaching systems that are based upon an ureahydrogen peroxide complex to promote oxidation at a faster yet safe rate. Because of its potent active ingredient, Day White is to be applied on a home regimen in 30-minute applications, twice a day for 7 days. At least one independent study has reported significant change in tooth shade from darker to lighter at 7, 14, and 28 day evaluations.

Day White is available in a unique dual-chamber syringe design (Figure 1). One chamber contains the hydrogen peroxide stabilized at a low pH and the other the water-based activator solution mixed with a blend of soothers, conditioners and flavor enhancers (xylitol, aloe vera, and eugenol). At the time of use, the two gels are delivered through a precision automixing nozzle into the tray (Figure 2). Day White has a prolonged shelf life of three years unrefrigerated as an added attribute of this uniquely elaborated delivery system.