This article illustrates advancements by Glidewell Laboratories to improve the esthetic properties of BruxZir® Solid Zirconia restorations. As the lab’s research and development department refines its processes, improving the material’s translucency, the esthetics continue to improve.

First appointment

Our goal is to replace the PFM crowns on teeth #8 and #9 (Fig. 1) with BruxZir Solid Zirconia crowns.

First, we take the shade before the teeth become dehydrated. I use the Vita Easyshade® Compact (Vident, Brea, Calif.), which displays the shade in both Vita Classical and Vita 3D-Master® shades. After taking the shade, I hold the selected 3M 3D-Master shade tab to the tooth, along with the 3M 3D-Master shade tab for contrast. Next, we photograph the shade tabs in the mouth. This is probably the most important part of communication: the technician giving the lab enough reduction.

Second appointment

After two weeks, the temps are off, the emergence profile is flat. The temporaries are then replaced.

Third appointment

After two weeks, we remove the temps and clean the preps with a KaVo ELECTROTorque handpiece (KaVo Dental, Charlotte, N.C.), it is simple to cut through the existing PFM. I torque the crown with a Christensen Crown Remover (Hu-Friedy, Chicago). After using a periodontal probe to sound to bone to ensure I have enough biologic width to safely remove some tissue (Fig. 3), I use my NV MicroLaser® (Discus Dental) to remove 1.5 mm of tissue.

Using an Ultracut syringe to place PFG gel (Steven’s Pharmacy; Costa Mesa, Calif.) to cement the BioTemps provisional material (DMG America; Englewood, N.J.) before refining the preparation. Two moistened ROEKO Comprecaps (Kolziene/Whaledent, Cuyahoga Falls, Ohio) are placed on the preps, and the patient is asked to bite with medium pressure for eight to 10 minutes. The Comprecaps are then removed and the top cords pulled. We syringe medium body impression material around the preparations for the impression and then take a bite registration. The temporaries are then replaced.

Third appointment

After two weeks, the temps are off, the BruxZir crowns are approved, and we place a layer of desensitizer on the teeth GS™ All-Purpose Desensitizer [Clinician’s Choice, New Milford, Conn.]. I use a Warm Air Tooth Dryer (A-dec, Newberg, Ore.) after applying both coats of the GS, while my assistant places Z-PRIME™ Plus (Risco, Schaumburg, Ill.) inside the crowns. We then load the crowns with a resin-modified glass ionomer cement (Reluxi™ Luting Plus Automix [3M/ESPE]) and seat them, using a pinewood stick (Almare International, Portland, Ore.) to ensure they are fully seated and the same length.

In this “after” picture (Fig. 4), the amazing thing is there isn’t any porcelain on these BruxZir crowns, they are solid zirconia. This is why they are stronger than all other restorative materials, except cast gold.

Also, the facial anatomy on the crowns makes them look like real teeth. Because that anatomy is built into the CAD/CAM database, Glidewell Laboratories can deliver it every time — provided the clinician gives it the lab enough reduction.

While I’m not suggesting you suddenly switch all of your anterior restorations to BruxZir crowns, you may want to consider using it for patients with parafunctional habits or old PFMs, where an esthetic improvement is essentially guaranteed.

By Michael C. DiTolla, DDS, FAGD

Here at Yankee

For more information on BruxZir crowns or to see them for yourself, stop by the Glidewell Laboratories booth, No. 1905.
App lets you try on a Pro-form mouthguard

Application also provides in-depth information on all Pro-form products

Ever wonder what you or your patients would look like with a certain color mouthguard?

Pro-form offers a nearly unlimited amount of options for custom, vacuum-formed mouthguards. That’s why Keystone Industries has created an iPhone and iPad app to help dentists and patients see what they would look like wearing a Pro-form mouthguard.

Check out the new, free Keystone Pro-form Mouthguard app today. The app is easy to use — just smile wide and take a photo. Then you will be able to see what you look like with a Pro-form mouthguard.

Is one of your patients on the fence about getting that patriotic red, white, and blue mouthguard, or maybe someone wants a purple and gold mouthguard? There are so many choices to try on, and you get to see exactly what they would each look like.

Once you’ve taken a photo, you’ll be able to save the photo to your iPhone or iPad, and you can also email it.

In addition, the app has information about the Pro-form line and the protection it can provide for athletes of all levels (even professional athletes).

Key features of the app include:
- Free to install
- Uses iPhone/iPad camera for high-definition photos
- Easy-to-navigate menus
- Hundreds of Pro-form selections
- Information and links to Keystone’s website and social media
- A large library to enable you to save photos
- Ability to email photos to whomever you want

Keystone Industries plans to continue to grow the app through updates and will offer new versions that will display other products.

Customers will be informed of any updates or newer versions.

Here at Yankee

For more information on Keystone Industries and Pro-form Mouthguards, call (800) 333-3131 or visit www.keystoneind.com. The app is free in the iTunes store by searching “Keystone Industries” or “mouthguards.” In addition, be sure to attend Thomas Zaleske’s hands-on course, “New Opportunities With Vacuum Forming,” from 8 to 10 a.m. and from 1 to 3 p.m. today to learn more about Keystone Industries’ products.
BIOLASE, a leading dental laser manufacturer and distributor — and distributor of NewTom and 3Shape TRIOS technologies in North America — is showcasing its full line of award-winning laser systems, 3-D cone-beam devices and digital intraoral scanning technology here at Yankee Dental Congress and at all other major and regional 2013 trade events.

The company is featuring the products in its new Total Technology Pavilion, a large space with functioning equipment to allow hands-on demonstrations and discussion of the full range of applications. The pavilion also features an overview presentation of the total technology concept, along with brief presentations by practicing dentists who have deployed such technologies in their practices.

“We are proud to present the Total Technology Pavilion at the Yankee Dental Congress and beyond,” said John Bernhard, director of marketing at BIOLASE. “It represents the collective efforts of multiple teams to create an environment where dental professionals can spend time with these groundbreaking technologies to gain an understanding of their applications in the dental clinic.”

**A total tech solution**

**BIOLASE hands-on showcase includes new EPIC laser**

**EPIC standard set for diode lasers**

New to the Total Technology Pavilion this year is the EPIC Total Diode Solution, the newest laser from BIOLASE. It’s described by the company as being packed with one category-exclusive feature after another, setting a new standard in diode laser performance and value.

A graphical touchscreen gives dentists fingertip access to as many as 20 common soft-tissue procedure presets — plus 30-minute full mouth whitening and FDA-cleared temporary pain relief.

Additionally, EPIC can be a financial boon for many practices because of its integrated, FDA-cleared protocols for laser hygiene and peri-implant. A new ComfortPulse setting reduces pulse length to as little as one ten-millionth of a second to avoid heat buildup at the surgical site. This provides for fast tissue cutting with less patient discomfort.

**3Shape TRIOS digital scanner, full range of WaterLase all-tissue lasers**

Another addition to the Total Technology Pavilion is the 3Shape TRIOS digital intraoral scanner system. The TRIOS digital solution, which includes a handheld scanner, operator’s control cart and intuitive software, provides faster impression taking, improved accuracy and clinical results, reduced need for retakes and less adjustment and grinding.

According to 3Shape, TRIOS’ unique features include spray-free scanning, high accuracy optimized for an extensive range of indications, clinical scan validation, online communication with the dental lab and intuitive Smart-Touch user interfacing.

Other products in the pavilion include WaterLase iPlus, WaterLase MDX and WaterLase MD Turbo. BIOLASE’s full range of all-tissue laser devices. According to the company, WaterLase iPlus represents a pinnacle of 20 years of research to improve cutting speed to match that of a high-speed drill, with a fraction of the discomfort and ancillary challenges a dental drill creates.

The WaterLase MDX and WaterLase MD Turbo are described as being ideal for practices seeking a basic, lower-cost entry point for all-tissue laser dentistry. “Although the WaterLase MD platform was first released in 2004, there have been many improvements and refinements, including a more flexible fiber, faster-cutting handpieces and more,” said Dmitri Boutoussov, BIOLASE chief technology officer and longtime head of the company’s research and development department.

NewTom compact CBCT technology

Finally, the Total Technology Pavilion has full-size models of NewTom Cone-Beam Computed Tomography (CBCT) technology. The technology is relatively new to dentistry and is a more compact version of standard medical CT imaging that uses a cone-shaped X-ray beam to obtain a multitude of radiographs that construct digital 3-D models of maxillofacial anatomies.

The NewTom VGi is reported by the company to have the finest image quality of any CBCT system in dentistry, with a minimal dose of radiation to patients. Dentists using the NewTom CBCT technology report increased treatment plan acceptance, improved diagnostic capabilities and other advantages, according to the company.

**About BIOLASE**

BIOLASE is a biomedical company that develops, manufactures and markets dental lasers and distributes and markets dental imaging equipment. BIOLASE’s core products include dental laser systems that perform a broad range of procedures (including cosmetic and complex surgical applications) as well as a full line of dental imaging equipment and CAD/CAM systems. BIOLASE has sold more than 21,000 lasers. Other products under development address ophthalmology and other medical and consumer markets.

(Source: BIOLASE)
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29th Annual AADC Scientific Session
A ‘Beautifil’ line

Dr. Howard Glazer talks about the evolution of flowable resins and how Beautifil Flow Plus and Beautifil II can benefit your patients

By Kristine Colker, Dental Tribune

Dental Tribune recently sat down with Dr. Howard Glazer to talk about the Beautifil line of products.

Beautifil Flow Plus is a GIOMER-based material that can be safely and effectively used in a variety of restorative procedures because of its availability in a wide range of shades and its ability to resist wear and maintain a high gloss finish.

To compliment Beautifil Flow Plus, there is the conventional composite Beautifil II, which is extremely durable, long lasting and ideal in larger restorative instances.

Dr. Glazer, you’ve mentioned before that the Beautifil line is particularly good for Baby Boomers. Could you expand on that?

First of all, the word “beautiful” is not misspelled, but rather a play on the product name Beautifil from Shofu. The title is to imply that as my generation is maturing, there may be a need for enhanced esthetic restorations, and Shofu’s Beautifil line of products will allow the dentist to provide those services.

Could you talk about flowable resins in general? What are some of the advantages of them and what should clinicians be looking for when they pick one to use? Flowable resins, such as Shofu’s Beautifil Flow Plus, have undergone a wonderful evolution into a material that is no longer just used for a base or liner but can now be used as a full restorative solution.

Clinicians should look for a flowable resin that can be used as a base-liner-restorative and has the following characteristics: highly viscous, stackable, good color range and stability, high compressive strength so as to be abrasive resistant, highly polishable and plaque resistant, fluoride releasing (viz. GIOMER chemistry) and, of course, is durable over a long period of time.

How long have you been using Beautifil Flow Plus and Beautifil II? What are the advantages of both of these materials that you have found, and why would you recommend them to other clinicians? I have been using Beautifil II for more than three years, and it has been about two years since I was introduced to Beautifil Flow Plus. I would recommend both to my colleagues without reservation.

As I’ve mentioned before, the new era of what I call “no flow-flowables” allows us to use these materials in instances where we previously had to use conventional composite resins. For example, I readily use Beautifil Flow Plus in Class V and Class I restorations as well as shallow Class IIIs. I rely on Beautifil II for large Class II restorations where I want a more packable resin that will also tolerate high masticatory forces.

That said, there are many instances whereby I create the cusps with Beautifil Flow Plus and fill the bulk of the restoration with Beautifil II.

The Beautifil product line is created by Shofu. How did you begin working with the company and what is it that you like about its products and services? My first association with Shofu was an introduction by a colleague who asked me to try its seventh-generation adhesive, Beutibond.

As a big fan of seventh-generation adhesives, I was duly impressed and began to familiarize myself with more of its products. I continue to be impressed with its product line and, therefore, continue our relationship not only because of the products but also because of the people who are Shofu.

Is there anything you would like to have meeting attendees know about the Beautifil product line? My objective is to have attendees leave with a better understanding of what can be accomplished for our patients with flowable and conventional composite resins and to introduce them to the benefits of the beautiful Beautifil product line. If they stop by the Shofu booth (No. 1229), they can see these products for themselves.

OCTO BIOMEDICAL DD SINUS LIFT KIT

OCO Biomedical, a creator and distributor of dental implant technology for more than 30 years, introduces the DD Sinus Lift Kit. The DD Sinus Lift Kit contains all of the instruments needed to perform a sinus lift procedure using the crestal approach. The DD Sinus Lift technique is unique in that it allows for permeation of the blood supply from the osteotomy into the sinus cavity for enhanced healing and formation of new bone.

All components are labeled for easy removal and return to the tray after autoclaving for sterilization. There is also an extra compartment underneath the caddy that provides room for additional instruments, if necessary. The DD Sinus Lift made its debut at the two-day advanced surgical course held at the OCO Biomedical training facility in Albuquerque, N.M.

Course participants were able to observe a crestal approach sinus lift procedure during a live surgery performed by a local dentist.

They were also able to perform the procedure on models that were specially designed for the crestal approach sinus augmentation.

To obtain additional information on the DD Sinus Lift Kit, call (800) 228-0477 or stop by the OCO Biomedical booth, No. 835, here at Yankee Dental Congress.
The PhotoMed G12 Digital Dental Camera is specifically designed to allow you to take all of the standard clinical views with “frame and focus” simplicity. The built-in color monitor allows you to precisely frame your subject. Then focus and shoot. It’s that easy. Proper exposure and balanced even lighting are assured. By using the camera’s built-in flash, the amount of light that is necessary for a proper exposure is guaranteed. PhotoMed’s custom close-up lighting attachment redirects the light from the camera’s flash to create balanced, even lighting across the field.

For more information, visit www.photomed.net, call (800) 998-7765 or stop by the PhotoMed booth, No. 2106, here during the Yankee Dental Congress.

CLEARFIL MAJESTY ES-2 CLASSIC

CLEARFIL™ MAJESTY ESTHETIC is now CLEARFIL MAJESTY ES-2 Classic, the only composite with VITA-approved shades. Kuraray’s pioneering light diffusion, or LD technology, creates restorations that are virtually invisible, making shade matching simple, with only a single shade. Available in syringe or PLT (pre-loaded tip), CLEARFIL MAJESTY ES-2 Classic is easy to shape and polish and can be used in either a mono- or multi-layer technique. CLEARFIL MAJESTY ES-2 Classic is available in 16 perfectly matched VITA shades, which includes specialty shades for bleaching.

For more information on CLEARFIL MAJESTY ES-2 Classic, or any other Kuraray products, please visit www.kuraraydental.com, call (800) 879-1676 or stop by the booth, No. 2003, here at the Yankee Dental Congress.