By Anamaria Muresan, DMD, ME, CDT

In the anterior region where esthetics are paramount, certain complications can preclude the use of all-ceramic material. The task then becomes finding a material worthy of the anterior with the durability to meet precise standards. Obsidian® Lithium Silicate Ceramic Pressed to Metal (Prismatik Dentalcraft Inc.; Irvine, Calif.) puts an innovative spin on PFMs, with traditional porcelain passed over for lithium silicate ceramic. The result is five times the strength and more than two times the chip resistance of traditional PFMs.

A 27-year-old male patient presented with an old PFM crown on tooth #9, which had undergone endodontic treatment about 10 years prior to address decay. A darkened margin, visible due to gum recession on the facial, posed a distinct problem for this anterior case. In addition, the esthetics of the PFM crown were noticeably inadequate. To achieve an optimal outcome in the face of these difficulties, the first task in the treatment plan was to match the gingival height of tooth #9 to #8. Choosing Obsidian for the new crown was important.

Central details: Smile renewed with esthetic Obsidian crown

Fig. 1: A 27-year-old male patient presents with an old PFM crown on tooth #9, which had undergone endodontic treatment about 10 years prior to address decay. A darkened margin, visible due to gum recession on the facial, posed a distinct problem for this anterior case. In addition, the esthetics of the PFM crown were noticeably inadequate. Fig. 2: Obsidian Pressed to Metal crown masks the darkened stump shade at the gingival third while also blending in with the overall smile. Photos/Dr. Anamaria Muresan, Provided by Glidewell Laboratories

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Edentulism: Implant prosthesis therapies designed to optimize function, esthetics

By Dr. Massimo Pasi, Prof. of pathology and odontostomatology, University Vita-Salute San Raffaele, Milan, Italy

Total or even partial edentulism is a serious handicap for those who are affected. As we have often seen, responsibility for the edentulism often lies with the sufferer — a reminder to dental professionals of the importance of educating patients (especially younger patients and their families) on healthy lifestyle choices (personal hygiene, nutrition, physical activity, regular dental check-ups). The moment a person becomes edentulous, however, it is our duty to try to improve the quality of his life by restoring proper chewing function (without further jeopardizing health) and to improve social life (not compromising psychological health). For many patients, re-

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tant in providing esthetics, as all-ceramic materials were eliminated from consideration due to the dark gingiva of the tooth in question.

In relation to the rest of the patient’s smile, the PFM crown on tooth #9 does not offer harmonious shade and contours and fails to mirror the natural translucency and character of tooth #8. I used a gingivectomy on tooth #9 to improve contours, which was completed with a Picasso™ Lite diode laser (AMD Lasers; Indianapolis, Ind.).

To improve visibility of the gingival contours, I used hydrogen peroxide to scrub away the charred tissue tags. The gingival height of teeth #8 and #9 is now more symmetrical while avoiding violation of the biological width. In order to approach a normal cervical contour with the provisional and the final restoration, it is important to mirror the CEJ of the other central. Otherwise, the restored tooth will have a narrow form and will not look esthetic.

With retraction cords in place and Capture® medium- and heavy-body impression materials at the ready, a two-cord impression technique can be carried out. This case features a shoulder preparation to ensure enough thickness for the ceramic labial margin to block the darkness of the preparation at the gingiva.

A temporary crown provides a preview of how the new anterior restoration can blend in with the overall smile. Photos of the mocked-up temporary were included in the information provided to the lab technician.

After sandblasting the inside of the restoration, the Obsidian Pressed to Metal crown is ready to be cemented with RelyX™ Luting Plus (3M™ ESPE™; St. Paul, Minn.). The Obsidian Pressed to Metal crown successfully masks the darkened stump shade at the gingival third while also blending in with the overall smile.

Previously, a PFM was the common restorative choice for a case involving a darkened stump shade. Fortunately, today’s clinicians have Obsidian Pressed to Metal, which outperforms traditional PFMs. Natural-looking esthetics and proven strength propel Obsidian Pressed to Metal past its predecessors.

Fig. 1: The bar screwed on the implants on the upper jaw with the four OT Equator attachments. Photos/Provided by Dr. Massimo Pasi

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Visalys® Core, from Kettenbach LP (www.kettenbachusa.com), represents the next generation of core buildup materials, according to the company. The most recent addition to the Visalys family is a dual-curing core buildup material with unique Active-Connect Technology (ACT) to ensure a reliable bond with all common adhesives — without an additional activator. The product was unveiled at the 2015 International Dental Show (IDS) in Germany.

Visalys Core is the first core buildup material from Kettenbach. The fluoride-containing, dual-curing composite was developed for the fabrication of radiopaque core buildups and core fillings and for cementing root posts.

According to the company, the Active-Connect Technology, unique in the market, enables the material to bond actively with all common light-curing and dual-curing, single-step and multistep adhesives, without an additional activator. The advantage for users is that it enables them to use the bonding agent they are used to — whether it is light-curing or dual-curing — or a single- or multi-bottle system.

Firm foundation
According to the company, the technology simply provides a firm foundation — stable and precise. The company reports that Visalys Core ensures easy and reliable handling with "excellent positional stability." At the same time, it exhibits good flowability and low extrusion force. The compressive strength results in a stable monoblock and a secure bond. Optional light-curing allows the procedure to be continued immediately. Reliable self-curing provides for dependable strength even on the cavity floor and in root canals. Excellent polishing characteristics ensure precise preparation; even without light-curing, the smear layer is minimal. The product is also free of Bisphenol A and its derivatives.

Visalys Core is available in dentin and white shades in a 5 ml double syringe and in a 25 ml cartridge.

For detailed information about Visalys Core, visit the Kettenbach website at www.kettenbachusa.com.

About Kettenbach
Kettenbach (Huntington Beach, Calif.) is the exclusive U.S. distributor for Kettenbach GmbH & Co. KG (Sachsenburg, Germany). Founded by August Kettenbach in 1944, Kettenbach GmbH was created for the development and marketing of medical and dental products. Today, the company is one of the leading international producers of dental impression materials and is also known in other surgical areas of medicine. Brands include Panasil VPS Impression Material, Identium VSXE Impression Material, Futar Bite Material, Silginat Alternative Alginate, Visalys Temp Material, Mucopren Resilient Liner and Visalys Veneers. For more about Kettenbach products, you can call (877) 532-2123 or visit www.kettenbachusa.com.

(Source: Kettenbach)
Location, location, location

As in real estate, moving to the right place can be key to enjoying dentistry

In real estate, it’s all about location, location, location. In dentistry, it’s also about location, and that certainly was the case for Dr. Monica Garnache.

Many dentists who own or work with an Aspen Dental-branded practice join Aspen after getting a taste of private practice. But Garnache took a different route on her way to owning multiple Aspen Dental practices.

Garnache knew she wanted to be a dentist at a young age. She had a childhood dentist who inspired her to work in health care. Dentistry appealed to her because of the instant gratification. As a dentist, she imagined being able to immediately help people and see quick results – whether giving a patient some pain relief or a new smile.

After attending Tufts University School of Dental Medicine in Boston, Garnache became a temporary dentist. She joined an Aspen Dental practice in New England as an associate doctor before becoming a lead dentist in that office. She then opened a new Aspen office in New Hampshire. She loved working in an Aspen practice, with the support of Aspen Dental Management Inc., the dental support organization that handles the business side of things. She wanted to become a practice owner right away.

Due to family reasons, however, Garnache had to relocate to California after only two years with Aspen. Since there are currently no Aspen practices in California, she couldn’t fulfill her dream of ownership with Aspen. Instead, she purchased a traditional private practice in the San Francisco Bay Area. Even though there are close to 900,000 people in that area, there are also more than 8,000 dentists, making the area highly competitive for practicing dentists because there is no shortage of dental care. When Garnache discovered this, she knew she had to make a change.

“One morning, my office manager came to me and said, ‘Doc, you need to find two crowns to do today so we can pay the bills,’” Garnache recalls. “This was a complete shock. I never heard that before.”

Around the same time, Garnache heard that Aspen had expanded into the Pacific Northwest, so she sold her practice in California and moved to Oregon, where she opened her first Aspen office as a practice owner. Just a few years later, she now owns three Aspen practices, has been able to build strong and engaging teams, and has a steady flow of patients who desperately need dental care.

With Aspen Dental, dentists can work their way up – in just a few years – from an associate dentist right out of college to an owner of multiple practices. Although Garnache is now an accomplished dentist and practice owner, her path to success required her to be open to relocation and new adventures in order to achieve her childhood dream. Luckily, the Aspen model provides dentists with the opportunity to relocate for a variety of reasons.

If you or someone you know is interested in relocating or joining an Aspen practice, you can send the company an email at recruiting@aspendental.com.

Dr. Monica Garnache, below, and, at left, with some of her team members, sold her traditional, practice in California and moved to Oregon expressly to open her own Aspen Dental office (and, ultimately, two more). Photos/Provided by Aspen Dental

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placing missing teeth in the maxilla with a full denture may be an appropriate solution. But a full denture in the lower arch is absolutely incongruous: It does not allow sufficient chewing efficiency; it often an overdenture stabilized by four implants, especially in the maxilla and/or when the patient is unlikely to accept the time, expense and surgical invasiveness of regenerative therapies.

Fig. 2: Orthopantomography control after six months of the end of rehabilitation.
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- Our dedicated in-house R&D team of 57 scientists and engineers creates and tests clinical products and materials.
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- Comprehensive, affordable clinical education is offered in-person and online, with quality learning materials delivered to dentists across the U.S. in the form of free quarterly publications.

- Hahn™ and Inclusive™ Tapered Implants, along with 2,692 individual components, are manufactured in our Irvine, California, facility.

- The Glidewell International Technology Center in Irvine, California, provides didactic and hands-on clinical programs.

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Henry Schein Inc. in June donated more than 25,000 toothbrushes to Timmy Global Health, a non-profit organization that leads teams of medical professionals and health science students to underserved and isolated communities throughout the world to provide treatment to local populations and develop and maintain long-term health care.

Since 1997, Timmy Global Health has served more than 84,000 patients in five countries, providing medical, dental, and vision treatments, along with other services such as midwifery and immunizations. The toothbrushes—many of which have already been given to patients in Ecuador, Guatemala, and the Dominican Republic—will continue to be distributed at mission sites throughout the year. The donation is an initiative of Henry Schein Cares, the company’s global corporate social responsibility program.

“Timmy Global Health has created a sustainable model for expanding access to health care and maintaining it in some of the most at-risk corners of the world,” said Stanley M. Bergman, chairman and CEO of Henry Schein. “Henry Schein is proud to support organizations such as Timmy Global Health, whose values and commitment to ‘helping health happen’ so closely align with our own.”

Timmy Global Health is able to supply some of the world’s most remote areas with essential financial, medical and human resources by partnering with community-based programs. Through its services, Timmy Global Health has provided these partners with more than $1 million in funding and more than $25 million worth of in-kind contributions, which includes thousands of toothbrushes.

“The areas that we serve have little or no access to health care, and we often find oral health issues to be prevalent in these communities,” said Dr. Chuck Dietzen, founder and president of Timmy Global Health. “We understand the necessity of providing basic supplies, such as toothbrushes, in order to have a lasting impact on the overall health of community members. With its donation, Henry Schein has made a direct contribution to the health of thousands of individuals around the world. We at Timmy Global Health are grateful and happy to work with a company that genuinely appreciates the value in our work.”

(Source: Henry Schein Inc.)