

Cosmetic dentistry

Patients are requesting it. Dentists need to provide it. Three experts discuss the latest products, procedures, and philosophies.

By Gail Weisman



Advanced ceramic systems, loupes, low-shrinkage composites, digital cameras, expanding tooth-whitening options...the cosmetic dentistry repertoire is growing and making its way into more and more general dental practices. And the reason is simple—patient demand.

Cosmetic dentistry is no longer the exclusive realm of models and actors.

“The needs and wants of the patients in my community are the same as they are anywhere in the country,” noted Dr. Michael Sesemann, who maintains a full-time private practice in Omaha, Neb., serves as the chair of the Accreditation Committee of the American Academy of Cosmetic Dentistry (AACD), and is the only AACD-accredited practitioner in the state of Nebraska. “I may be a bit of a fish out of water in this area, but people here, as anywhere else, are very knowledgeable about cosmetic dentistry, and they know what they want done.”

Additionally, cosmetic dentistry is no longer the exclusive realm of the Park Avenue and Beverly Hills practitioner.

“With the many opportunities for continuing education around the country, all dentists have access to quality instruction to help them hone their cosmetic dentistry skills,” said Dr. Debra Gray King, president of The Atlanta Center for Cosmetic Dentistry. “I am not a member of an exclusive club by any means. All dentists can participate in hands-on courses and master cosmetic dentistry techniques.”

Material advances

Luckily, dentists have more options than ever in terms of materials and procedures for cosmetic procedures, which paradoxically presents a challenge—how to choose the best material for any particular clinical situation.

“Always ask for clinical trials when investigating a new product,” cautions Dr. Mike Malone, a private practitioner from Lafayette, La., and President of the AACD. “If the manufacturer is trying to push a material to market before trials are completed, that’s a red flag. For the most part, however, the manufacturers are doing a great job.”

Dr. Malone puts some of the blame for the “rush to market” phenomenon on dentists.

“We keep demanding better materials that work fast, for all clinical situations, and for the least cost. Manufacturers feel pressured,” he said.

Dr. Sesemann has seen a noticeable drop-off in the number of brand new products he has been trying out. “Over the past five years in my practice, we aren’t changing materials and techniques as quickly as we were in the early ’90s,” he said. “Even as recently as eight years ago, the learning curve was steep, and products and procedures were evolving at a rapid pace. Personally, I am elated that we have identified a solid repertoire of predictable and effective materials and techniques and that we really don’t feel the need to change unless something dramatically better comes along.”

CAD/CAM in the lab

In the past couple of years, the most visibly marketed new product concept in cosmetic dentistry would have to be the laboratory CAD/CAM crown and bridge systems, which mill either zirconia or alumina frameworks as an alternative to metal. These systems offer the strength of PFMs without the dark substructure.

“The ability to create beautiful bridges that are not supported by metal is a phenomenal step forward,” said Dr. Malone. “The systems are new enough that we have to be judicious with their use, but I have no doubt that they will evolve and improve.”

One interesting conundrum has arisen with these CAD/CAM systems. The required preparation designs are very similar to those for PFMs—so dentists are very familiar with and comfortable creating them. These traditional preparations, however, are not as conservative as those required for other metal-free systems, like pressables.

“The traditional full-crown prep designs, which incorporate significant axial reduction to reduce the opacity of the zirconia or alumina framework, go somewhat against the esthetic revolution and the mantra of conservative tooth reduction,” said Dr. Sesemann. “But the manufacturers are addressing this.”

Also in their favor, these milled-framework restorations can be placed with conventional cementation.

Continued on page 20



“You cannot provide excellence... without...enhanced vision.”

—Dr. Michael Sesemann

Continued from page 18

Composites

“Better than ever,” is how Dr. Malone described the state of composite resin technology today. “New and better systems continue to be developed with the use of different filler types and sizes. The ultimate goal is to find the ideal composite restora-

tive—one that bonds predictably to all tooth structure, does not shrink when cured, wears like enamel, and looks like natural dentition. We are moving continually closer, and in terms of esthetics, I’d say we are almost there.”

Whitening

“Whitening has become a revolution of sorts in our society,” observed Dr. Sesemann. “It’s been a wonderful motivator for people to stay involved with their oral health and appearance.”

All three interviewees offer a range of tooth-whitening services, and their preferences seem to mirror the general dentist population.

“I use a light-activated system for in-office bleaching and have been very pleased with the results,” said Dr. King. “We also provide custom-tray-based kits for home use.”



Periodontal (gingival) manipulation can help achieve bilateral harmony.

Dr. Sesemann, on the other hand, also offers take-home kits, but does not use light-activated chairside whitening. “The preponderance of the independent research is indicating that the light-activated bleaching gel works the same, with or without the light,” he said.

Neither doctor recommends over-the-counter whitening—but they acknowledge their appeal.

“I don’t actually discourage patients from using OTC bleaching kits, but I do tell them that they are not going to get the same results that they would with procedures that I offer,” said Dr. King. “Most of the time, patients are not satisfied with the results from the OTC products, and they opt for the professional whitening anyway. The OTC products do raise the dental awareness of patients.”

One word: Magnification

Loupes—perhaps the most revered item in the 21st century cosmetic dental practice.

“You cannot provide excellence in cosmetic dentistry without some form of enhanced vision,” said Dr. Sesemann. “Loupes take you to a whole new level, allowing you to see as well as feel when working. All members of my staff use loupes.”

While Dr. Sesemann likes the freedom of movement afforded by telescopic loupes, Dr. Malone believes that there is a movement toward higher and higher magnification, which may mean an increase in the popularity of operating microscopes.

Worth a thousand words

Photography, and more recently digital photography in particular, is an integral component of the practice of cosmetic

Continued on page 22

Continued from page 20

dentistry. On its most basic level, it helps the doctor communicate with the patient about his or her own case.

“I have found that patients are much more at ease discussing their smile when they view it on a screen instead of in a mirror,” noted Dr. King. “They tend to be

more relaxed and objective.”

“Photography is one of the most important aspects of my practice,” Dr. Malone said. “I have been photographing every new patient since the early 1980s, regardless of the type of treatment they require. We use a combination of digital still photography and intraoral video cam-



“Patients are more at ease viewing their smiles on a monitor.”

—Dr. Debra Gray King

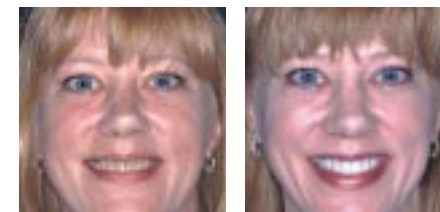
eras. Digital still images are used for initial case presentation and treatment planning; an intraoral video camera is in every operatory and used on hygiene patients to monitor changing conditions over time.”

Education – continuing and continuous

“The first thing a new dental school grad should do is go right back to school,” noted Dr. Malone. “Every year, undergraduate programs are incorporating more adhesive dentistry into their instruction. But schools are mandated to teach students what they need to know to pass state boards exams—basically amalgams and gold. There isn’t a lot of room in the curriculum for advanced cosmetic techniques.”

So it isn’t surprising that all three of the doctors interviewed for this article stressed the importance—the absolute necessity—of continuing education.

“Having been conservatively trained in the Midwest, learning proper esthetic techniques meant a significant commitment of time and money,” Dr. Sesemann said. “Each doctor must identify how he or she learns best and choose a variety of learning modalities, which include lectures, video programs, journals, and hands-on courses.”



Equilibration of occlusion can dramatically change facial features.

AACD accreditation

Among the many resources available to practitioners for learning cosmetic dentistry techniques, the AACD’s accreditation program is perhaps the most comprehensive. Currently, about 5% of AACD members have achieved accreditation. Some have perceived the program as restrictive and political, but Dr. Sesemann explained that the AACD has evolved the program to enhance confidence and interest in accreditation.

“We have strived over the past few years to put together education systems to coincide with the accreditation journey so that the candidate knows exactly what they need to do to pass and exactly what happens each step of the way,” he said.

The four-part process, which must be completed over a five-year period, involves passing a written examination, attending two workshops, submitting five cases in predetermined categories (which are assigned

Continued on page 24

Continued from page 22

a number rather than attributed to a clinician so that judging is done anonymously), and passing an oral examination (which is tailored to resemble other board exams).

“We’d like to differentiate ourselves from other organizations. We designed our program to be a meaningful, educational

experience,” Dr. Sesemann said. “The successful candidate has a deep resolve to do whatever is necessary to get through the process, and most importantly to learn from it and become a better practitioner.”

Other resources

Continuing education opportunities for

improving esthetic dentistry techniques are growing rapidly. For those not ready for or interested in accreditation, the AACD offers a variety of courses at its annual session (see sidebar, below right).

“The AACD meeting is where I learned the basics of the cosmetic dentistry procedures I use today,” said Dr. King.

For the first time this year, learning tracks at the session have been implemented into the educational program; all courses have been classified by subject matter and experience level so attendees can choose the most appropriate sessions.

Several private institutions, such as San Francisco-based P.A.C~live (www.pa-live.com)

Continued on page 26

AACD's annual session heads for Vancouver

Themed “Picture Perfect—Revealing the Beauty Within,” the American Academy of Cosmetic Dentistry’s (AACD) 20th Anniversary Scientific Session will be held April 27-May 2, 2004, at the Vancouver Convention



Centre in Vancouver, British Columbia.

Open to AACD-member and non-member clinicians,

laboratory technicians, dental hygienists, clinical assistants and business representatives, the session will include a comprehensive variety of course types:

General Sessions—Each morning, a full-assembly presentation provides information to help attendees create a balance between their professional and personal success.

Lectures—Programs are presented by long-standing, renowned educators and up-and-coming dental professionals.

Hands-On Workshops—These intensive courses allow participants to work with the latest materials and techniques in the classroom while being instructed by leading practitioners.



Limited-Attendance Courses—These courses cover specific procedures in clinical treatments and the different roles of the dental team.

New Product Seminars—Live demonstrations spotlight the latest innovations in cosmetic dentistry.

Panels & Symposia—An array of experts participate in panel presentations on hot topics in cosmetic dentistry. At AACD Orlando 2003, these included occlusion, spa dentistry, and women in cosmetic dentistry.

The session also includes manufacturer’s exhibits and a variety of social and recreational activities.

Complete details, including registration information, can be obtained by visiting the AACD Web site at www.aacd.com or calling 800-543-9220.



“Always ask for clinical trials when investigating a new product.”

—Dr. Mike Malone

clive.com), the Las Vegas Institute for Advanced Dental Studies (www.lvilive.com), and The Hornbrook Group (www.hornbrookgroup.com) offer a wide range of hands-on learning opportunities in basic to advanced cosmetic procedures.

Whatever avenue is chosen, for dentists looking to expand the cosmetic aspect of

Continued from page 24

their practices, the message is—get trained. And the reason is—most cosmetic dentistry products are very technique sensitive.

“Almost all cosmetic dentistry is related to adhesion of tooth-colored materials to natural tooth structure,” said Dr. Malone. “You have to master the right techniques for success.”



A diastema was closed with direct bonding, and teeth were bleached.

Answering the skeptics

“Do no harm.” Those exact words do not appear in the Hippocratic oath, but the sentiment does. And a vocal minority of dentists take the words very seriously and have taken issue with the concept of removing otherwise sound, functional tooth structure simply for cosmetic purposes.

“I don’t take the issue of preparing enamel without caries lightly,” responded Dr. Sesemann. “There is a moment of truth when a dentist sits down to prepare a cosmetic case. If there is the slightest mystery as to where the preparation of that case is going, the practitioner should not be touching the tooth. Only after careful analysis of all factors, including the analysis of risk-to-benefit ratio, should any case be treatment planned for restoration.”


Conclusion

Education is the key to success in cosmetic dentistry. Hands-on training in working with the latest materials along with gathering reliable information on the features and applications of new products will give the practitioner a strong foundation to confidently and successfully provide a variety of cosmetic dentistry services. **DPR**

Gail Weisman is editor of DPR. She can be reached by e-mail at gail.weisman@medec.com

Photo credits

The before and after photos on pages 20 and 22, and above courtesy of Dr. Michael Sesemann.



What's online

To access information on hundreds of cosmetic dentistry products, go to the Search Content tab on our home page. Click on Products on the pull down menu. On the next page, you can search by any keyword or check out either the Cosmetic or Materials sections from the category choices.

