cerec doctors.com
advanced education for C
MAGAZINE Q1 | 2010

CEREC & IMPLANTS PART III

» TARUN AGARWAL, D.D.S.

LET'S MAKE CEREC A HOUSEHOLD NAME

» SAMEER PURI, D.D.S.

ARMEN MIRZAYAN INTERVIEWS LEE ANN BRADY

SPEAR EDUCATION'S EXECUTIVE VICE PRESIDENT OF CLINICAL EDUCATION

THE BIG QUESTION

» IMTIAZ MANJI

EXCLUSIVE
CEREC 3.8 SOFTWARE PREVIEW!

Serving ALL Of Your Cerec® Needs

High Tech

- 100% Digital Design and Milling From Your Cerec Scans Sent Via Cerec Connect®
- Cerec Model System Allows Us To Create Any Type of Restoration Without Impressions.
- Send YOUR Scans For Use With Our Instant Design Services.

High Touch

- Comprehensive Support Guiding You Through Every Step.
- Let Our Extensive Training, Experience, and Expertise Assist In Your Cerec Success.

Special Introductory Offer
Any e.max Cerec Milled Restorations
$99.00
Offer Expires 4-30-2010
Valid for Accounts Starting After 2-1-2010
Applies To Milled & Glazed Only, No Build-Up

Burbank Dental Laboratory
Smiles By Design

BURBANK
DENTAL LABORATORY
800-336-3053

Generations:
Adrew Sedler
Advanced Technologies Director
3rd Generation in Dentistry

cerec doctors.com
advanced education for CEREC owners

Contributors

» CERECdoctors.com Co-Founders
Sameer Puri, D.D.S.
Armen Mirzayan, D.D.S., M.A.

» Clinical Co-Editors
Mark Fleming, D.D.S.
Darren Greenhalgh, D.D.S.

» Writer/Editor
John Roark

» Contributors
Tarun Agarwal, D.D.S.
Lee Ann Brady, D.M.D.
Mark Fleming, D.D.S.
Darren Greenhalgh, D.D.S.
Imtiaz Manji
Greg McAllister, D.D.S.
Armen Mirzayan, M.A., D.D.S.
Daniel J. Poticny, D.D.S.
Michael Skramstad, D.D.S.
Brian Thornton, D.D.S.
Dan Weber

» Design
Brent Baker
Craig Kurtz

» Photos provided by:
Scottsdale Center for Dentistry
CERECdoctors.com
Sirona

❖

For sales and membership information, please contact:
» Membership Coordinator
Elizabeth Davison
liz@cerecdoctors.com
818.998.7474
cerecdoctors.com

Contents

FROM THE EDITORS

Engage For Success

MARK FLEMING, D.D.S. & DARREN GREENHALGH, D.D.S.

We don't need to tell you how many things fight for your attention. You constantly have to choose what you are going to do next. But even after that choice is made, there is another important, ongoing decision that needs to be made: How engaged are you going to be with this choice you just made?

Making a choice is but the first step in taking on any new venture. After this choice, what are we willing to do to make ourselves successful in an endeavor? How engaged are we going to be? Lukewarm engagement, lukewarm results. Is that what we want? It's time to ask the next question — What's next?

Imtiaz Manji shares with you his ideas concerning this big question: What's next? He talks about commitment. He also talks about how we handle opportunities when they are presented to us. What actions do we need to take to be successful? How engaged are we?

We also have an article on a CEREC doctor who refused to get stuck in a rut. Dr. Greg McAllister made a decision to implement technology into his practice, and stayed engaged in the process by asking what was next to ensure his success.

In this issue, Dr. Lee Ann Brady, vice president of clinical education at Spear Education, is the subject of our interview. She shares her thoughts and experiences with CEREC. A great point she makes is that if you want to be successful in implementing CEREC Technology into your practice, you must be engaged in constant education. Dr. Brady also has a sidebar, "What's next for you and CEREC?"

Of course, we continue to provide you with clinical articles. Drs. Agarwal, Greenhalgh, Mirzayan and Poticny share different cases with us, showing different aspects of CEREC Technology.

Our doctor profile tells how Michael Skramstad became involved and stays engaged with CEREC Technology. And Dr. Sameer Puri presents an idea answering the question: What's the next step in making CEREC well-known? (You may be surprised with his answer.)

We hope you have made or will make the decision to become and stay engaged with the CEREC Technology. Here at *cerecdoctors.com* magazine, our goal is to provide you with the latest techniques, tools and technology to help you with this decision. We hope you enjoy this issue. ❖

» CEREC Technology is front and center in Dr. Michael Skramstad's practice.

100% CUSTOMER SATISFACTION GUARANTEED!

ivoclarvivadent.com

Call us toll free at 1-800-533-6825 in the U.S., 1-800-263-8182 in Canada.

ivoclar vivadent®
passion vision innovation

THE BIG QUESTION

Two Simple Words That Can Drive Your Future in Dentistry

BY IMTIAZ MANJI

The future is already here," the author William Gibson said, "it's just unevenly distributed." He was talking about how, right now, some people are doing things with technology that will be commonplace in a matter of years. In dentistry, we know that CEREC is the future, and we know that there is a significant number of people practicing CEREC dentistry at the highest level right now. For them, the future is already here.

And then there are people who place ads like this:

"CEREC CAD-CAM Dental System — Nearly NEW — DISCOUNT!"

That was the heading of an eBay listing I came across awhile ago. "I guess I'm slow to make changes, and found that I wasn't using my new CEREC machine at all," the seller explained in his description. He went on to say, "This machine is basically brand new. I have only made a handful of crowns on it (less than 10). Now it can be yours at a huge discount."

My first reaction on seeing this was one of profound disappointment on behalf of the seller. What a huge opportunity lost — for him, for his team and his patients.

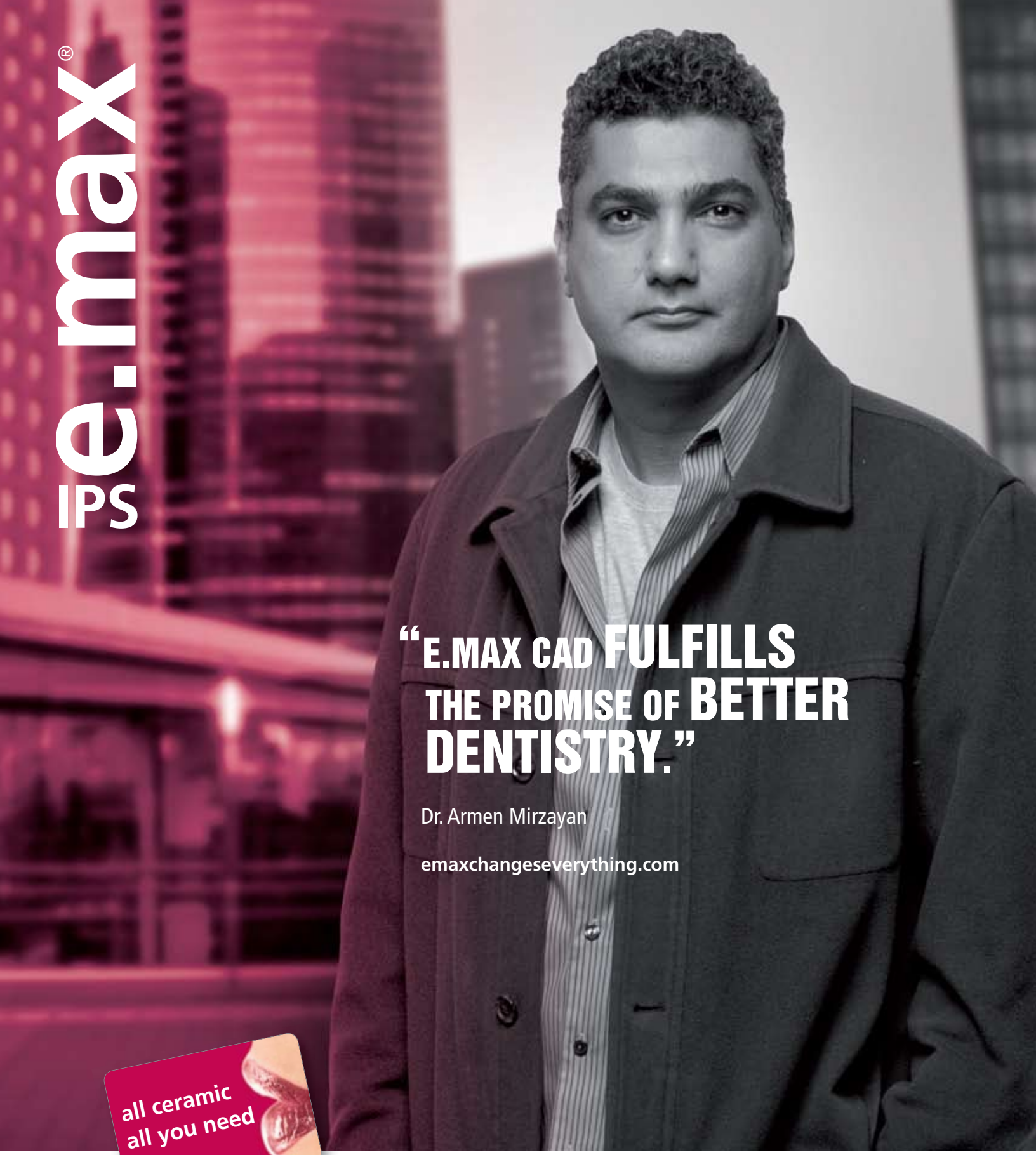
We all know that any new clinical skill you acquire — placing implants, doing endo procedures — requires a level of commitment to get past the initial feelings of unfamiliarity.

You don't just give up after the first attempts. Yet with fewer than 10 crowns completed, this dentist obviously never engaged at the right level — he never had a chance to get comfortable with CEREC clinically, to integrate it into his workflow and environment, and he couldn't possibly have begun to master the techniques of communicating its value to patients. He never even bothered to acquire the fundamental skills that would have given him some momentum — and that doesn't take a lot. He'll never know how close he was to transforming the way he practiced dentistry. His career as a CEREC dentist was over before it began.

At the same time, though, I found in this CEREC "annulment" an eye-opening insight into human nature.

I can't help but wonder what other things in life this dentist approaches in this way, what other great opportunities he has missed out on because his initial enthusiasm dissolved in the face of having to "make changes."

And I think about how the difference between him and most CEREC users is just a matter of degree, and how there are shades of this story in all of us.



100% CUSTOMER SATISFACTION GUARANTEED!

ivoclarvivadent.com

Call us toll free at 1-800-533-6825 in the U.S., 1-800-263-8182 in Canada.

ivoclar vivadent®
passion vision innovation

THE MOST IMPORTANT QUESTION IN LIFE

The struggle toward great achievement, I think, is a struggle to break out of the boxes that confine us. Many of us who are business owners live in a very programmed world, which is necessary for running an efficient enterprise, but can also be constricting when it comes to progressive thinking. It's easy to become trapped in these boxes around time and money in a way that constrains our ability to see possibilities. It's easier to take comfort in the routine and structure you have built than it is to continually ask yourself what you are doing today that will make you better tomorrow: a better business owner, a better clinician, a better team leader, a better person. Yet relentlessly challenging yourself in this way is the essence of growth, and the people who do it successfully are driven by a simple question, a question they ask themselves as a way of sharpening their focus and re-charging their sense of purpose. It's the most important question you can ask in an inspired life: "What's next?"

Take a look around any fitness center and you'll quickly see how different mindsets lead to different results. On the one hand, you have the casual drop-ins, reading magazines on the stationary bike, chatting with friends, going through the motions of a routine they've probably gone through hundreds of times without much thought. They're getting exercise, no doubt about it, but they're not committed to much beyond working up a mild sweat. On the other hand, you have the people who have scheduled time with a personal trainer and are being coached and timed through an intense, focused workout, where results are recorded and compared, progress is charted and new goals are set. It's easy to tell who is getting more from their time in the gym and who can expect higher levels of fitness.

This is why I have personal trainer myself. A trainer won't let you coast through a session. They won't let you be satisfied with doing "the usual." They'll drive you to pursue a level until you're comfortable doing it. Then — and this is most important — they show you what's next and set a new challenge in front of you.

When you start applying the "what's next?" question to everything you do, you notice a startling change in your thinking and motivation. You come to evaluate life in a new way, as an ever-evolving experience. You see opportunities beyond those boxes that want to keep you confined. That's because "what's next?" thinking, by its very nature, creates dissatisfaction with the status quo, an excitement for new possibilities, and a driving sense of urgency that forces you to act on your commitments.

That's the secret at the heart of growth, in anything in life. It's the "fire in the belly" that keeps you asking the big question. The rest of it — the details around how to get to those new levels — is just a matter of strategy.

BEYOND THE CLINICAL

If you're reading this, it's a safe bet that your level of engagement with CEREC is high enough for you to have reached a point where you are using it regularly, capably and efficiently — at a certain comfort level. But it's also likely that there are levels you haven't yet explored — in which case it's time to ask yourself: "What's next for me with CEREC?"

What's Next for You and CEREC?

BY LEE ANN BRADY, D.M.D.

It's a moment that comes in the education of just about every comprehensive CEREC dentist.

I have had the incredible opportunity to teach alongside Dr. Puri and Dr. Mirzayan in the CEREC curriculum at Scottsdale Center for Dentistry, and I always watch for it — it's the time, shortly after a participant has mastered a new level of CEREC implementation, that they come to the realization of what this means and how it's about to transform the way they practice dentistry (often accompanied by a realization of what they've been missing by not doing this long ago). Even though they come fully expecting to learn new techniques, it's still a powerful moment of revelation when things actually click into place. It's the exhilaration that comes with seeing new possibilities open up before your eyes.

So what is your next step? What's going to be your next moment of discovery? Take a moment now to do a quick inventory of your level of CEREC proficiency. How many of these procedures (at right) are you consistently and confidently performing with CEREC?

Every item you've left unchecked represents a huge opportunity for exciting professional growth—a moment of revelation in waiting. If you're committed to that kind of "what's next?" thinking that drives champions, you need to be taking stock like this and using the gaps in your knowledge to create your action plan. An action plan that starts today, because once you have identified what's next, there is only one question remaining: "What are you waiting for?"

CEREC PROCEDURES

- Single posterior restoration
- Multiple posterior quadrant restorations
- Full arch cases
  Single anterior restoration
- Multiple anterior restorations
- Veneer restorations
- Implant restorations
- Smile restorations

Security you can rely on.

Special CERECdoctors Offer

Purchase (1) Multilink Automix Easy Clean Up Cement System Pack and get (1) refill of IPS e.max® CAD FREE! *Promo code #406*

NEW Easy Clean-Up

Multilink® Automix
UNIVERSAL ADHESIVE CEMENT

The high-immediate bond strengths of Multilink Automix create a strong link to all types of restorative materials giving you and your patients security you can rely on.

- Fast, easy clean-up
- Reduces sensitivity
- Highly visible on dental x-rays

ivoclarvivadent.com/multilink

100% CUSTOMER SATISFACTION GUARANTEED!

ivoclarvivadent.com

Call us toll free at 1-800-533-6825 in the U.S., 1-800-263-8182 in Canada.

Suggested retail value free goods is $149.95. Promotion valid from March 1 - May 31, 2010
CERECdoctors is not a registered trademark of Ivoclar Vivadent, Inc.

ivoclar vivadent®
passion vision innovation

For instance, just about all CEREC dentists I know are confidently and consistently using CAD/CAM technology for posterior restorations. But with the advances in materials and techniques that are now available, if you're not strategically case-selecting other procedures, such as the anterior possibilities CEREC offers, you're cheating your patients, your team and yourself (see the accompanying sidebar by Dr. Lee Ann Brady for a breakdown of what you could be missing).

Let's also look beyond the strictly clinical. What about the way you have integrated and optimized the use of CEREC in your practice? For example, adapting the use of your time and your assistants to make the most of this technology can make a huge difference in productivity and scheduling, as well as things like patient flow and case acceptance.

Let's face it; in a busy practice the schedule will always be filled. But if you're going to break out of your boxes, you have to start thinking strategically about what gets scheduled where, and have the right people in the right places at the right times. You have to think about how you're integrating CEREC with other technology in the facility, and how you're using it to communicate value and drive same-day acceptance.

It's always easy to rationalize away our inertia ("I don't have the right team, the right facility, the right client base," etc.), or to make action conditional on external forces ("I'll do it when the economy picks up"). But if you are going to be true to yourself, you'll be honest about where your gaps are in CEREC mastery, and relentless about getting help to close them.

This is what the CEREC curriculum at Scottsdale Center for Dentistry is all about. Dr. Puri and Dr. Mirzayan and their team are like those personal trainers I was talking about. They hold a mirror up in front of you and show you what you're doing and what can be done. They expand your comfort zone around what's possible with CEREC, and they create genuine excitement for what's next.

Between that curriculum and the other special events — like the annual CEREC meeting, which brings together a community of CEREC leaders to discuss best practices in all areas — you have all the tools you need to reach new levels of success. Or rather, unexplored levels of success. The answer, after all, is always there. It's just waiting for you to ask the right question. ❖

Making the Most of It:
A New CEREC Owner Goes from Zero to Advanced in a Year's Time

BY IMTIAZ MANJI

Dr. Greg McAllister has never been one to get stuck in a rut. A University of Maryland dental school graduate, he moved to Albuquerque in 1993, working for several years in public health dentistry for a non-profit clinic before buying his own private practice. It is a modest but venerable facility (one of the oldest operating dental facilities in town, in service since 1949),—two chairs, 600 square feet. But over the years, he's made it a point to keep this quaintly situated practice technologically up-to-date.


Dr. Greg McAllister

"We're more of a family-oriented operation than a high-end esthetic practice," he says, "but we like to stay current with evolving technologies. For instance, we adopted digital radiography and fully integrated chairside computer workstations fairly early on." As his practice evolved and grew, he realized the next step was a relocation to a newer, bigger facility—a dream that led him to participate in the Dental Office Design (now Practice Harmony) workshop at Scottsdale Center for Dentistry. It was a move that put him on the path to CEREC success.

"As part of the process that came out of that workshop," he recalls, "we began to look at new technology that would help to position us for the next phase of my career and our move into a new facility, and CEREC was identified as one of those technologies that would keep us at the leading edge." He attended that program in February, 2008. CEREC was up and running in his practice three months later.

A lot of people might have waited, at least until the new facility was ready, before bringing in a major new technology. But McAllister understood that it was important to begin integrating CEREC into his practice before the move, so that he wouldn't be overwhelmed with trying to master a new technology while getting used to all the details of operating in new surroundings. What's more, he quickly understood that his introductory training was just scratching the surface of CEREC's possibilities.

"We took the basic training at first," he says. "I always involve my assistant because I want her to be able to work closely alongside me and actually take over at certain stages of procedures. But we quickly realized that there were gaps in our knowledge, that there were other possibilities we weren't even touching on."

McAllister and his staff got comfortable mastering the basics shortly after their initial training in spring of 2008. In mid-summer of that year, he was back in Scottsdale for the next steps.

"We didn't want CEREC to become a very expensive doorstop, as I've heard it has become in some practices where people may be a little intimidated by the learning curve. There's no doubt it does take time to master, but it's worth it. Not that we feel we have fully mastered it—it's an ongoing, ever-evolving process."

McAllister had heard about the CEREC courses in Scottsdale during his previous visits, and he was impressed by the comprehensive, progressive approach they offered.

"The curriculum follows a logical path, from mastering posterior single restorations to multiple posterior, and then into anterior applications," he says. To keep his momentum going, McAllister committed to taking the entire curriculum in a year's time, during which he became very impressed with the faculty's holistic and inclusive approach to CEREC education.

"Sameer, Armen and the entire faculty are so approachable," he says. "We had people there who were CEREC veterans of the earlier generations of the technology, and we had newbies like me. And the faculty really made an effort to make everyone comfortable and to address their specific needs."

In fact, McAllister found the Center to be an ideal CEREC immersion experience. "The investment they've made in the lab, and in the CEREC technology they have on-site, demonstrated to us their commitment. And the other course work I've taken there really drove home their whole organization's strong belief in CAD/CAM technology. It just made sense that this was the place to go."

And it doesn't end with the clinical education. McAllister has taken the Business of CEREC course to learn about how best to integrate CEREC and amplify its value, and he was a participant in the CEREC annual meeting last year, where he got to mingle with other CEREC enthusiasts and get inspired about where he can go with CEREC. "We're never done," he says. "This is an ongoing process of development."

It's a process that's already paying dividends. McAllister says that his new CEREC proficiency, along with other recent advances from courses he has taken, help account for his gain in hourly production from $235 to nearly $400. And that is only going to increase as he takes possession of his new facility, with more operatories, more staff, and a dedicated space for his CEREC milling unit. (Although he is already finding advantages to using CEREC in a small facility. "In a small office, you almost can't help but run into the milling unit," he says, "and people are curious about it. It's a great conversation-starter, and even if they're not a CEREC candidate right now, maybe one day they will be, or they know someone who is.")

Which leads to the big question: What's next for Dr. McAllister? Aside from the major move to an exciting new facility this fall, he has upgraded to Bluecam technology and the latest CEREC software. He keeps up to date with developments through *cerecdoctors.com*, and he's going to be back for the CEREC annual meeting. In the meantime, he says, "I've been in touch with Sameer about auditing some of the courses to keep up with any changes, and I'm always keeping my eyes and ears open for additional courses in Scottsdale, for CEREC or for other things that will take me to the next level. That's what keeps dentistry fresh and exciting." ❖

Q&A
Lee Ann Brady, D.M.D.

Meet Spear Education's Executive Vice President of Clinical Education

BY ARMEN MIRZAYAN, M.A., D.D.S.

Spear Education's vice president of clinical education never planned on a career as an educator. Turns out, it was a perfect fit. In this conversation with Armen Mirzayan, Lee Ann Brady opens up about how CEREC has transformed her own practice, and the impact of dentistry's digital revolution.

Mirzayan: *Hi, Lee Ann. For those clinicians who may not be aware, please tell us about your credentials and the journey that ultimately lead you to become the vice president of clinical education at Spear Education.*

Brady: I graduated from the University of Florida College of Dentistry in 1988, then practiced as an associate in several different practice settings from 1988 to 1993. I purchased and ran my own practice in Atlanta from 1993 to 1999. In 1999, I left dentistry for two years and returned to practice in 2001 in Jacksonville, Fla.

In January 2005, I joined The Pankey Institute as a full-time faculty member, and then ultimately became clinical director. I continued to practice one day a week. In September of 2008, I joined Spear Education

in my current role, where I also continue to maintain a small private practice in the Spear Education Faculty Practice.

I never planned on a career in education, and never saw myself in this role. When I was approached by Spear Education, they saw a potential in me that I had not seen in myself, and I have never looked back. I love dentistry and education. It has been the perfect mix.

"I never planned on a career in education, and never saw myself in this role. When I was approached by Spear Education, they saw a potential in me that I had not seen in myself, and I have never looked back."

Q: *Tell us your thoughts on CEREC, if you had any experience with utilizing CAD/CAM prior to moving to Scottsdale, and your perception of the technology as it stands to date.*

A: Three years ago, my experience with CEREC had been several machine demos over the years that had left me thinking everything from, "this will never last" to "there is no way this fits for my practice." My experience with CEREC prior to moving to Scottsdale was a two-day training program with Sirona that left me convinced I needed to continue to learn about the technology, that it was clinically viable, and that the previous challenges in a lot of ways had been mine and not the machine's.

Today, I love the technology. I use it routinely with my private patients, and see it replacing most of my direct operative procedures, as well as being an invaluable tool with indirect restorative. It is also one of the best educational tools to help doctors perfect preparation design that I have ever used, and believe it will elevate how we practice clinically.

Q: *What is the most surprising thing you have noticed about CEREC and its users since you have become involved in our CEREC curriculum?*

A: I'm not sure there is anything surprising about the CEREC community. I have come to understand that it is a community of people dedicated to doing the best for their patients, dedicated to learning and in some ways a much closer-knit community than others that I have been involved in. In a profession of people who work in isolation, maybe the most surprising thing is how connected CEREC users are to one another, virtually!

Q: *Scottsdale Center is stocked with 26 CEREC machines, and often times, clinicians in a Spear course utilize the technology. Please share with us these experiences – where the doctors incorporate the CEREC technology in the fabrication of their restorations during live patient courses.*

A: We allow the posterior live patient participants in the Spear curriculum to play with the technology. Most have never used the machine previously. It is an incredible way to see your preparations, and be able to discuss the nuances of prep design, margin refinement and creating preps that work for all porcelain restorations. As with most folks the first time they see or use the technology, they are awed by what it can do and a little overwhelmed. A large number of the restorations are completed virtually and milled, although we transfer the data and mill on our Sirona in-lab, as the course is not designed

to teach CEREC. Often we get participants in the class who are CEREC owners and complete their restorations during the course. The other participants are always amazed by the fit and esthetics of the results we get.

Q: *Longtime users of CEREC often find themselves justifying the utilization of this technology to their colleagues who do not incorporate the machine into their practices. Have you found yourself doing the same as you have readily fabricated restorations for the last few years?*

A: I have to a certain degree. More often I would say I meet folks who are curious about the technology and simply want me to share my experience and beliefs about it. I also meet many dentists who own the machine and want to share their experience, and wonder how they can become more proficient and expand the use of the technology in their practices. My answer is always education, as with everything, there is a learning curve. I can speak to this very personally, and know how much I have yet to learn, so I put myself with intention in that environment, around practitioners who are ahead of me on the curve.

Q: *Currently about 12 percent of the U.S. market utilizes CEREC. When do you think it will become commonplace, where the majority of clinicians will appreciate the benefits of digital impressions?*

A: Today, when I speak, most of the clinicians utilize a traditional impression technique. I believe that within five years that will have begun reversing, and I will speak to audiences where the majority of clinicians are utilizing digital impressions. Someday I will have to remind clinicians what impression material was used for!

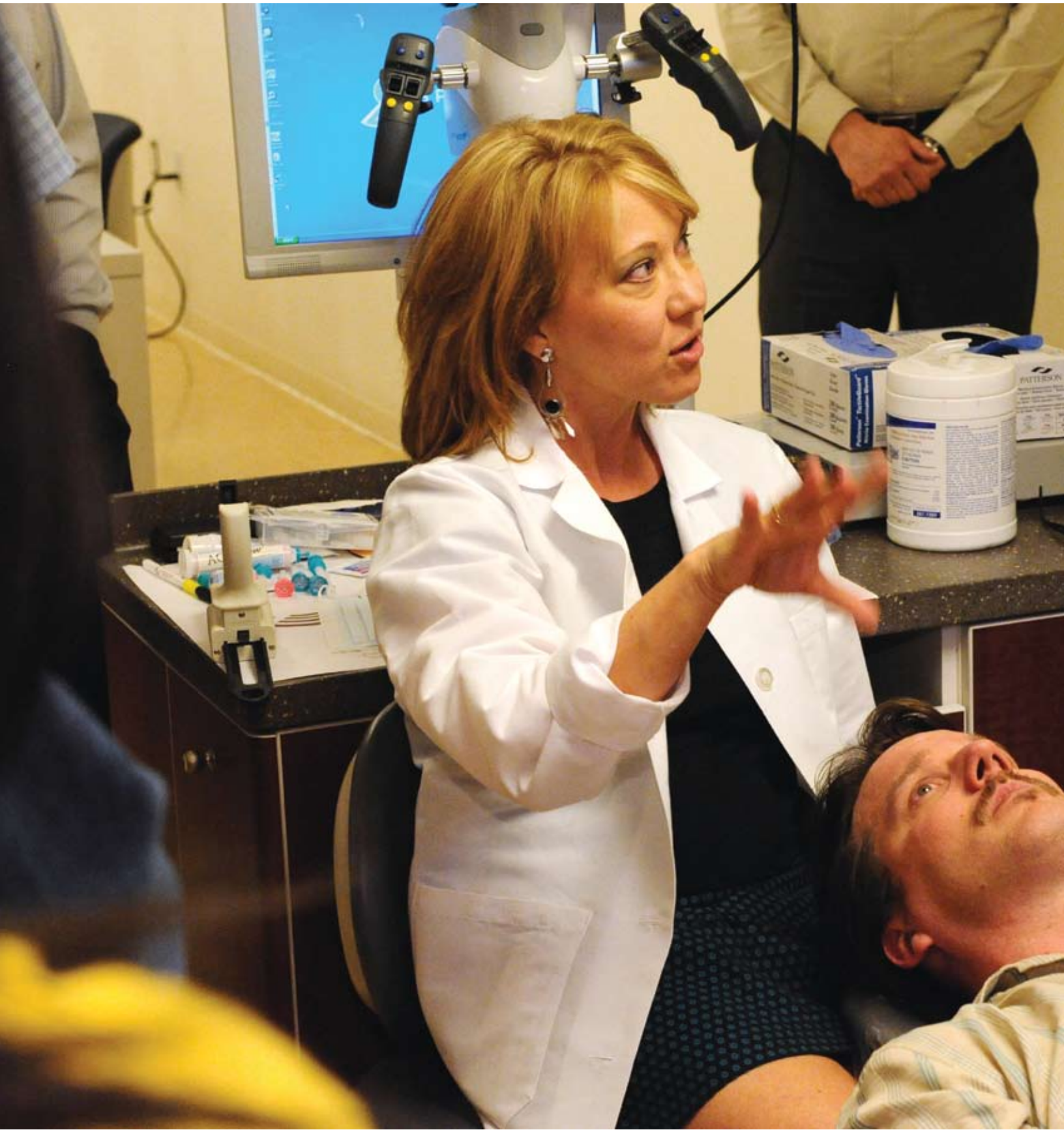
Q: *As I recall, your CEREC journey initially started with the first-generation camera called the Redcam, and soon thereafter the newer Bluecam was introduced. How did the technology of the new camera impact your learning curve?*

A: The Bluecam is an incredible advancement in imaging technology. I have found using the Bluecam much easier, and it accelerated my personal learning and ability to use the technology. Bluecam has also opened the door for so many advances with the technology and utilizing expanded capabilities. I really am not technical enough to understand the optical and software changes it took to get us to Bluecam, but I am glad it's here. The other day I had the chance to use a Redcam again, and literally felt crippled and went in search of a Bluecam acquisition center to finish the procedure.

Q: *With the advent of CEREC Connect, we can now scan our preparations intraorally and digitally transfer that information to a laboratory. This has dramatically broadened our scope of use for the machine, as we can now incorporate materials that we previously could not mill chairside. From your viewpoint, how do you see this expanding in the market place?*

A: I think CEREC Connect has filled a vital missing piece, and that is being able to utilize digital impressions to interface with a laboratory. Why not have the ability to scan anything you plan to restore in your practice, whether or not you plan to complete the final restoration or have a laboratory be part of the process? I have been able to play with the technology, and it couldn't be easier than to simply transfer the data electronically. The models are very high quality, and I am extremely impressed by the SLA model technology as well.

Q: *In our CEREC Mastery course, we have had the distinct pleasure of incorporating your sound principles of occlusion, smile designs principles, and facially generated treatment planning philosophies. Can you please expand on this, and highlight the benefits of this*



approach and how your involvement has propelled our course content to a higher level?

A: I am honored to be able to teach in the CEREC curriculum, and one of the things that I think all of us came together on when we met is our common philosophy of practice. Committing to looking at a case comprehensively and using exam findings that lead to a diagnosis, which in turn leads us to treatment planning options. Getting the optimal result from the CEREC technology is about giving it a solid foundation to work on, and the necessary information to create an exquisite result. In our curriculum we build this foundation by looking at esthetics, function, structure and biology, and then creating a plan. In the CEREC Mastery course I introduce many of the principles of esthetic and functional planning that allow the CEREC technology to produce the results the course participants are looking for.

Q: *What have you found to be the major roadblock that keeps a doctor from incorporating CEREC into his or her practice?*

A: There are several common things I hear from dentists who are thinking about the technology.

Many are not certain of the clinical applications and accuracy of the technology. I know a good deal of this comes from the early development of the technology, and today there is no question about the accuracy of the imaging or the milling process.

I also meet dentists who are daunted by the process of incorporating the technology and learning while running an active practice. I confirm for them that this is a valid concern, and believe that part of the commitment of purchasing the technology

is a commitment to learning it and participating in continuing education programs like the ones offered in Scottsdale. Having the ability to focus and learn, and be supported by some of the most talented and informed CEREC users in the nation must be part of the process."

a key ingredient that helped me gain competence with the technology and feel confident enough to go out and continue the learning on my own in my practice.

Q: *One of the most compelling things I have noticed over the years with CEREC users is that virtually every single one of them has a pioneering and adventurous side to them which makes the whole process very appealing. It is this same attitude that has afforded them growth in their personal and professional lives. I love associating with these progressive doctors, as their enthusiasm is contagious. Do you agree with this statement, and do you think this type of supportive group is behind the success of CEREC?*

A: I absolutely agree, as I think of the CEREC users I have met who mentor in your programs and jumped on the technology early. I do have to say I do not think moving forward that defines the newer group of CEREC users. I believe digital impressions and CAD/CAM dentistry are part of everyday practice and the trend is that it is not just mainstream, but will become the routine way we do things in the next few years. The conversation has shifted from being cutting-edge to being something that we all need to learn and become proficient with. I would say with confidence that at every course I teach, regardless of the topic, digital dentistry comes up in discussion and through questions. I think the conversation around digital dentistry has shifted

"I would say with confidence that at every course I teach, regardless of the topic, digital dentistry comes up in discussion. I think the conversation around digital dentistry has shifted from, 'Will it or won't it be part of my practice?' to 'How will it be a part of my practice?'" — *Lee Ann Brady*

Q: *As a seasoned educator, you have witnessed thousands of doctors excel at their profession with educational principles that guide them in their journey. What do you think our CEREC courses offer to clinicians that guide them to success in our specialized field?*

A: As with anything new we tack on in dentistry, CEREC has a learning curve. There are new clinical approaches to preparation design that allow the machine to create optimal results. There are new restorative materials that will be milled that the practitioner may not already be routinely using and familiar with. Digital impressions and interfacing with the technology is a very specific body of knowledge that the CEREC users needs to master.

The CEREC courses take a comprehensive look — from treatment planning to seating and finishing the restorations — but with a specific focus on the skills and information that are part of successfully integrating the technology. An important part of the CEREC programs is the community of CEREC users, and the support you all offer even when the doctors are back in their own offices. I know that personally participating in all three courses was

from will it or won't it be part of my practice, to how will it be a part of my practice.

Q: *A hot topic of debate is whether Class II indirect restorations are superior to direct restorations. A lot of research points to the fact that there is no significant advantage with indirect restorations. What are your views regarding this, and what does the current literature cite?*

A: Personally, I am a huge fan of utilizing CAD/CAM technology and composite blocks in my practice instead of placing these restorations directly. I have moved in this direction for the same reasons you state. If I never have to place a matrix band and wedges and worry about closing a contact, it will be too soon! Designing the margins and contacts and finishing the occlusal anatomy on the virtual die are easier, more efficient and much less stressful for me. I do believe I get a better result because it eliminates many of the challenges of the direct composite technique.

As for the material, some of the challenges of direct composite are adequate condensation, marginal adaptation and polymerization shrinkage that using a lab processed block overcomes. As for the literature, there is information on lab-processed composite and use in other restorative procedures that support the success of this application.

Q: *What are your views on the current materials we utilize for chairside use?*

A: We have the good fortune to work in a time in dentistry where we can accomplish our clinical outcomes thanks to a variety of materials, each with different properties. I have great materials that create exceptional esthetic results, like pressed porcelain blocks in one or multiple color gradients. I also have materials that excel in strength when I am working on a case with higher risk from function, or where we are restoring first and second molars like lithium disilicate as a monolith. In a previous discussion, we talked about milled composite blocks that have become a routine part of my practice for operative dentistry. These are simply examples of the restorative choices, not to mention different bonding systems and dentin adhesives.

It can be daunting to feel fully versed in this world of so many materials choices, but the other side of that conversation is all the incredible things dentistry today has to offer our patients, thanks to those materials choices. My role is to understand the materials and the clinical situations where they are most appropriate to accomplish the outcomes the patient and I have decided on. ❖

1985 2010

CEREC 25

YEARS OF CAD/CAM EXCELLENCE

IN VEGAS BE A CAD/CAM VIP

Join us as CEREC® celebrates its 25th anniversary in grand fashion...Vegas-style!

August 26-28, 2010

Join thousands of fellow CEREC owners and educators. Revel in luxury accommodations and premium entertainment at the dental event of the decade!

All this and more, including:

- **An extensive list of CAD/CAM related lectures**
- **Hands-on learning opportunities**
- **Earn up to 18 CE credits**
- **Build long-lasting business relationships**
- **Enjoy celebrity entertainment including Dennis Miller & Second City Improv Comedy Troupe**
- **Anniversary Celebration at PURE nightclub**

www.CEREC25.com

SPECIAL PERFORMANCE BY COMEDIAN DENNIS MILLER

OLYMPIC GOLD MEDALIST RULON GARDNER

Secure your reservation today! www.CEREC25.com

OVER 45 LEADERS IN DIGITAL DENTISTRY...


TARUN AGARWAL, DDS


KEVIN BARRETT, DDS


PD DR. ANDREAS BINDL


PAUL CHILD, DMD, CDT


ROBERT CONRAD, DDS


TODD EHRLICH, DDS


DENNIS FASBINDER, DDS


MR. JAMES GLIDEWELL


MARK HYMAN, DDS


MR. FRED JOYAL


J. ROBERT KELLY, DDS


JAMES KLIM, DDS


RICH MASEK, DDS


ARMEN MIRZAYAN. DDS


BILL MRAZEK, BS, CDT


NEAL PATEL, DDS


DAN POTICNY, DDS


SAMEER PURI, DDS


BERND REISS, DDS


JAY REZNICK, DDS


RICH ROSENBLATT, DDS


DOUG SCHULZ, DDS


MIKE SKRAMSTAD, DDS


ALEX TOUCHSTONE, DDS


PROF. DR. WERNER H MÖRMANN
INNOVATOR OF CAD/CAM & CEREC

THIS EVENT MARKS THE LAST PUBLIC APPEARANCE OF A VISIONARY WHO CHANGED DENTISTRY FOREVER.


GORDON CHRISTENSEN, DDS, MSD, PHD
DIRECTOR, PRACTICAL CLINICAL COURSES
SENIOR CONSULTANT, CLINICIAN'S REPORT (FORMERLY CRA)
SENIOR ACADEMIC ADVISOR, SCOTTSDALE CENTER FOR DENTISTRY


RELLA CHRISTENSEN, RDH, PHD.
CO-FOUNDER, CLINICIAN'S REPORT (FORMERLY CRA)
TECHNOLOGIES, RESTORATIVE AND CARIES RESEARCH (TRAC)


IMTIAZ MANJI
CEO, SCOTTSDALE CENTER FOR DENTISTRY


EDWARD MCLAREN, DDS
DIRECTOR, UCLA CENTER FOR ESTHETIC DENTISTRY


MARK MORIN, DDS
FOUNDER, GREAT LAKES EDUCATION CENTER FOR CEREC ADVANCED TRAINING


FRANK SPEAR
FOUNDER OF SPEAR EDUCATION

REGISTER TODAY!

CEREC25.COM

sirona.
The Dental Company

DESIGN TECHNIQUE

The Demise of Correlation — The Birth of Antagonist!

BY DANIEL J. POTICNY, D.D.S.

With well over 10,000 U.S. dentists now using CEREC, a considerable portion of them with more than three years experience, everyone has their particular design favorite. But upon what principle do they choose their particular technique?

Ever since the earliest versions of the CEREC software, it was always possible to choose from a variety of options for the final design of the restoration. I started with CEREC 2, when only inlays and onlays were possible. There has always been the potential to create restorations within the software, using a variety of design techniques: Dental Database, Antagonist, Correlation and Articulation.

The problem, however, was that they were tedious and time-consuming. I found that out of necessity, I was committed to the "design and grind" concept of CEREC, which meant contouring and adjusting the ceramic for a considerable amount of time after adhesive placement.

While it's true that four design techniques were available to me, the workhorses were Correlation and Antagonist after 2000; with advent of the CEREC 3 software and the later introduction in 2003 for the CEREC 3-D software.

Today, we have available to us the most powerful version yet of both the software and the hardware, leveraging the improved accuracy and functionality of the CEREC AC camera.

With the ability to automatically acquire images, reject images that will not contribute to the virtual model, and automatically reassign reference images, there is no doubt that the system is easy to use. And yes, we still have the ability to design restorations using Correlation and Antagonist, with Articulation and Replication being secondary options.

But the real question is, has your design choice kept up with the evolution of the system as it exists today?

For most of us where time is money, it is quite clear that design choice options will be based upon the choice that is the fastest way to get to a consistently reproducible outcome. Within this context, let's examine how these two design techniques compare with respect to posterior restorations.

Correlation design technique has been the easiest resident technique available to us, and for the longest time, relative to the CEREC system. Simple in concept, easy in ability to perform, if correctly used, it is the fastest way to produce a well-fitting restoration that will be "functional." (Please note that fit of the restoration is a function of preparation and milling.)

"Functional," on the other hand, is related to morphology and occlusal design, and this is where Correlation and Antagonist differ considerably with respect to the methods that are employed for each respective design technique for single posterior restorations.

In using Correlation, the most common technique is for the operator to image the "pre-condition" before preparation. The operator may elect to change the pre-condition prior to imaging through additions of resin material, wax, or otherwise to improve the morphologic form. You could also elect to re-shape the pre-condition in the mouth with the use of a handpiece.

The assumption when using Correlation is that by copying the occlusal table of the pre-condition, one can expect that it will be copied faithfully. Owing to the fact that this surface is already functional, and if it is copied faithfully, occlusion will be preserved intact. If occlusion and form are therefore preserved, the workflow for the operator should be vastly improved at time of delivery of the restoration, since occlusal equilibration and morphologic contouring will be either reduced or eliminated altogether. And in truth, on surface analysis, it

works as long as the operator is willing to accept the morphologic form as it was pre-imaged, and does not alter the occlusal surface during any step of the design process.

THE GO-TO CHOICE FOR POSTERIOR RESTORATIONS

Which brings the discussion to this point: How many clinicians design their restorations without in some way altering the occlusal table to smooth over pre-existing restorations in the pre-condition, or enhance morphology by using shape and form tools?

My experience in instructing clinicians over the years is that few dentists can resist the urge to "enhance" a design. The problem is, once the design is enhanced, one can never know how the change relates to the opposing tooth, as it is not available.

Additionally, in most cases correlates are universally "high" and many clinicians use parameter settings of negative values in "occlusal offset" to arbitrarily remove material from the surface of their restoration proposals.[1] It sounds nice in theory, but design time and evidence may not be on the side of the clinician. In all honesty, Correlation was taught first to, 'let the clinician experience success right out of the gate.'

I was also rather adept at customizing the occlusal table with a reasonably good end result requiring a minimal amount of occlusal adjustments at time of insertion. To be sure, it is very easy to pre-image the pre-condition and copy it over the preparation once complete, but does it reduce time after adhesive placement? I am well aware of a variety of techniques currently in vogue to purportedly create great morphologies with minimal to no adjustments. But without a bite registration, to what end? The simplicity and speed of correlation design is negated by the additional time required to design and equilibrate a restoration. My suggestion is that if you are going to use correlation for your posteriors, be certain not to change the occlusal surface unless you are willing to equilibrate significantly after placement.

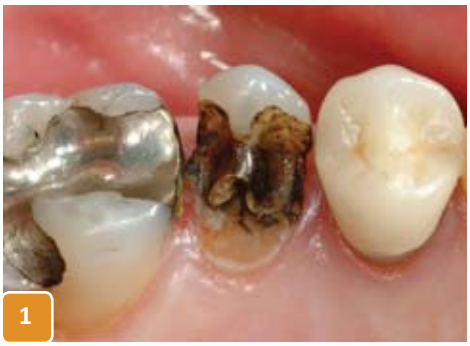
On the other hand, when examining Antagonist design technique, why is it not the universal choice for restoration design? After all, do not all dentists in the analog world of dentistry utilize impressions and stone models of both arches with a bite registration to index or articulate the two? Because we are digital dentists, can we somehow overcome the rules of basic operative dentistry? Or were there impediments to us routinely being able to use a tried-and-true method in a digital environment?

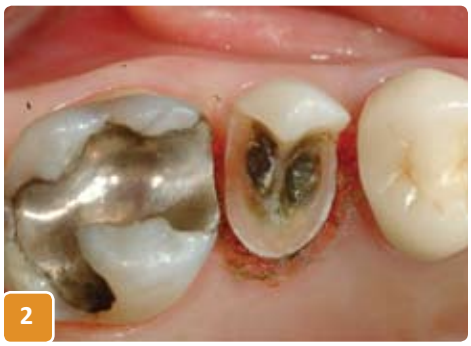
I would suggest to you today that impediments were the chief reason, particularly as it relates to what the infrared AU system could not do well for many clinicians: stitch images for longer models, match models between catalogs, and generate occlusally well-balanced proposals.

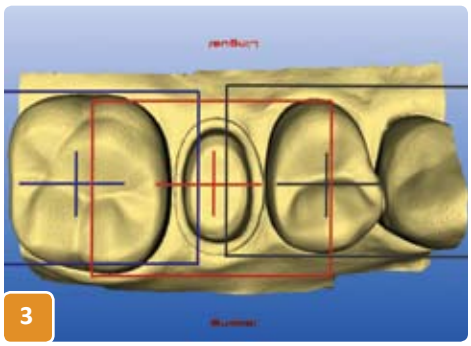
While I am not suggesting previous systems were inherently deficient in terms of the Antagonist design method, I am saying many clinicians reported difficulties in making Antagonist work for them. Perceived difficulties included physically imaging a bite registration in a patient's mouth. Things like interference from the tongue, powdering sensitivity, ability to use the bite registration material successfully, and simple unwillingness to commit additional time to acquire an additional set of models were seen as impediments to the routine use of Antagonist. Therefore, to set the record straight, the current CEREC AC system makes the long-term Correlation design aficionado want to reconsider. If so, how is Antagonist best and most correctly used?

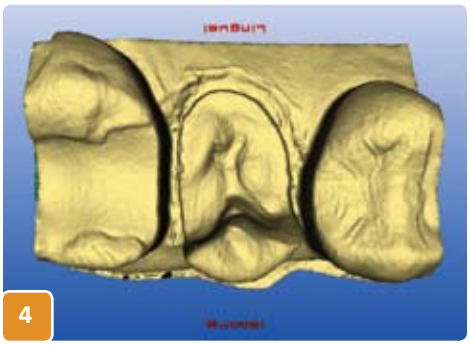
Antagonist is now my go-to design choice for the vast majority of my posterior restorations, and much of this is due to improvements to both the software and the hardware. Running quad core processors, improved software algorithms, rapid and automatic image capture, Opti-spray with Bluecam accuracy – nearly all of the perceived CEREC system impediments have been removed. The models have a higher level of accuracy, as compared to the Infrared AU system. With anti-shake features and automatic capture, multiple images

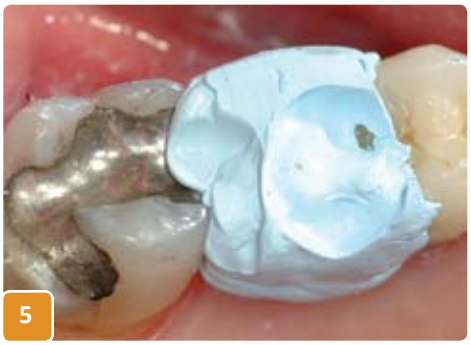
For most of us where time is money, it is quite clear that design choice options will be based upon the choice that is the fastest way to get to a consistently reproducible outcome.

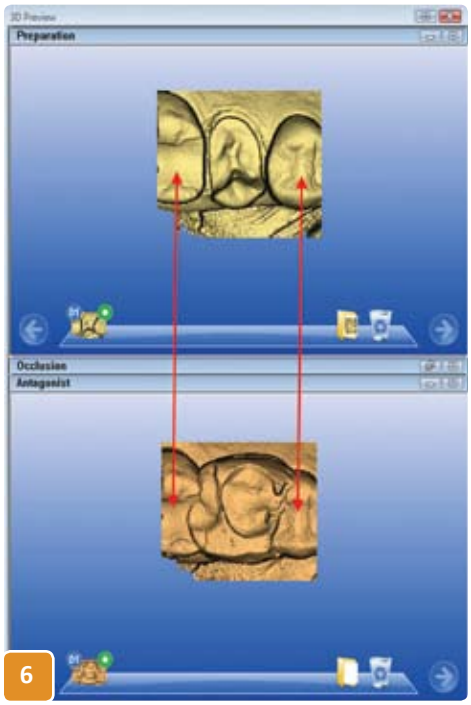












are simple to perform in-vivo. [2]

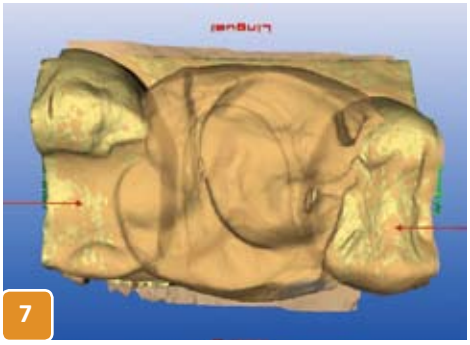
What follows is my technique to achieve success, letting you use morphologies that can be milled, and occlusion that can be more than managed, but controlled to produce restorations that may ultimately be the best-looking and most time-friendly you have ever produced using the CEREC system. "Antagonist" mimics the traditional restorative technique of an opposing model, a preparation model, and an "index" to articulate the opposing models in static centric. The program is robust, with accuracy a function of technique. And, like all techniques, will become easier, reproducible, and efficient with repetition.

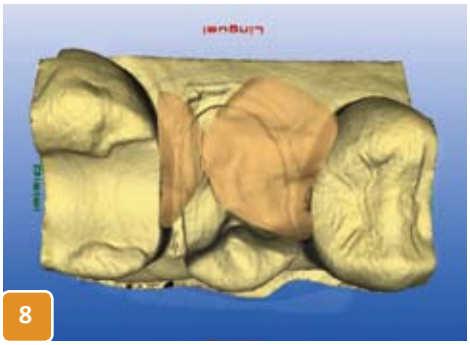
TAKING THE IMAGES

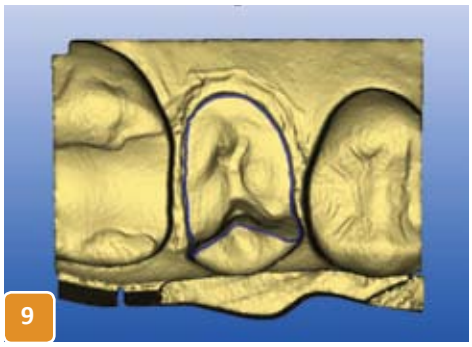
The patient presents with a fractured premolar (Figure 1). Once preparation is complete, the images were taken (Figure 2). I recommend Sirona Opti-spray applied in a single pass from distal to mesial in three applications. One pass each for three surfaces: occlusal, lingual, and buccal. As an alternate technique, I would recommend "puffs" by depressing the nozzle button repeatedly till a light, but uniform, coating is applied. On average, with Bluecam you will use 50 percent less powder, compared to the opaquing required with the CEREC Infrared AU system. My recommendation is that the number of images taken for the preparation model be limited to only those necessary to compute the preparation virtual model, with the ideal being one per tooth for the given length of model required. Multiple images past the preparation itself only serve to make a longer model for purposes of comparison with the antagonist catalogue.

The operator should keep in mind that the CEREC AC system is still a "top-down" reconstructive technique. As such, only one image is sufficient for the preparation itself, allowing for proper alignment of the axis of insertion of the preparation with the neighboring teeth, and with their heights of contour in full view. It is preferable that the preparation design itself allow for the camera to rest on the occlusal table itself, and as flat to it as possible to allow for the correct recording of the optical image for the preparation to occur without changing the orientation of the camera. In other words, prepare your tooth perpendicular to the occlusal table to facilitate camera placement.

Once this reference image is recorded, I would recommend that subsequent


7


8


9

images be taken to the mesial and distal with the camera in the same position as used for the preparation image.

For one preparation, three images are more than adequate; one for the preparation and one each for the neighboring teeth (Figures 3, 4). I do not recommend additional images to see below heights of contour and the like, as they are neither necessary nor desired. There is a general perception that more images will make for a more accurate model, thereby improving fits and adaptation. While true the AC Bluecam is very capable of taking a large number of images quickly and stitching them together easily, there is no practical or proven benefit of doing so for the preparation model. Only take a sufficient number of images so as to allow for the model of length that you choose.

Once you have acquired the images for the preparation model, use a quality bite registration material such as Virtual Bite (Ivoclar-Vivadent) or Futar-D (Kettenbach Dental) both of which have zero resistance to closure, no memory, and high Shore hardness. I would suggest that you fill inlay/onlay preparations and totally cover crown preparations. Close the patient into centric and have them remain closed for 45-60 seconds.

Once that patient opens, the bite registration should stubbornly resist removal. My recommendation is to not remove the bite registration from the mouth to improve accuracy of occlusal contact reproduction. [3] Trim the bite registration sufficiently, such that the neighboring teeth and their adjacent marginal ridges with respect to the preparation are in clear view (Figure 5).

To be assured model matching will occur, multiple images are very helpful but are not always necessary, as we shall see later. Begin imaging distally with the camera from the occlusal, roll the camera buccally and lingually 20° acquiring three images.

Next, proceed to the bite registration, taking one image occlusally, then proceed mesially acquiring three images for the mesial neighbor like you did for the distal neighbor. Use caution not to dislodge the bite registration by touching it with the camera. If you have a stable bite, this issue becomes moot.

You will have seven images in your antagonist catalogue, as opposed to three in your preparation catalogue. The value of these seven images for the antagonist will be to let your software match this antagonist model seamlessly, with more latitude as the independent of your camera angulation used in the preparation catalogue. Because AC Bluecam can acquire images easily and quickly, the impediments of the tongue and access to the mouth are greatly minimized. With automatic artifact removal from powder, and owing to less dependence on it, there is no reason to view this as being difficult. Remember, the antagonist catalogue does not contribute to the internal fits of your restoration. In the example shown, I have taken only one image in each, to demonstrate the principles of model matching remain the same – unchanged data at the mesial and distal ends of both the antagonist and preparation models (Figure 6).

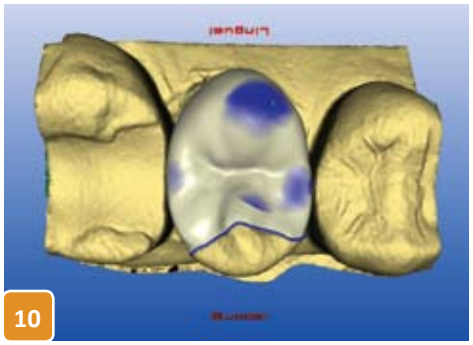
To be assured model matching will occur, **multiple images are very helpful but are not always necessary.**

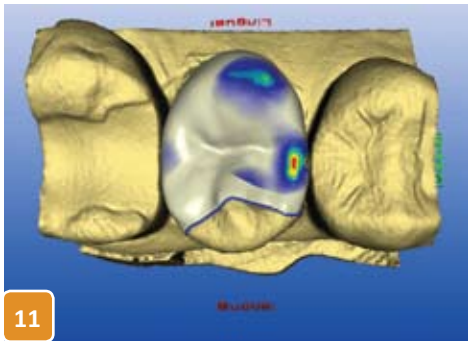
At this point you should have a virtual model that has successfully been software-matched to the Antagonist model (Figures 7, 8). I do not recommend "manual model" matching, as you are implying that you can identify the precise corresponding pixel on each model. Let the software do it, and if it can't, improve your technique! Always trim the bite registration and align your

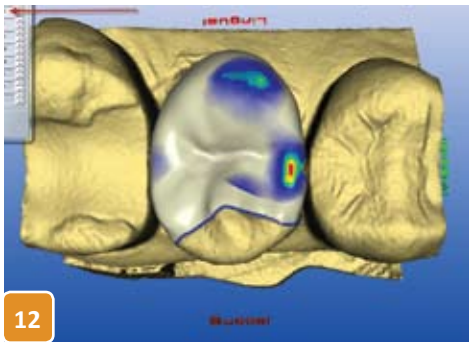
model in the insertion axis correction window such that your occlusal planes are parallel to your field of view, and generate the proposal (Figure 9, previous page).

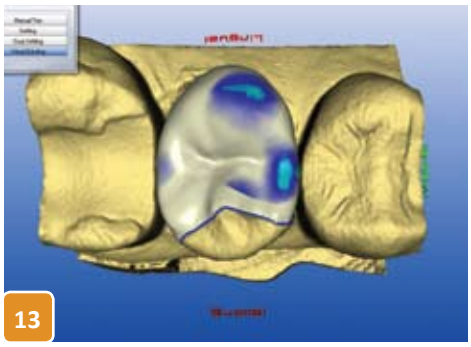
I have found that by following this protocol, proposals are generated that require little editing (Figures 10, 11). Once you have generated and refined your proposal, the "virtual grinding tool" is very useful. I use it to equilibrate restorations once the occlusal contacts are to my liking in terms of position, but differ in color intensity. Parameter settings control this, and I have found that I need a negative number to eliminate most post-insertion equilibrations, yet still maintain contact with the antagonist. (Figure 12, 13). We do know that when virtual grinding is set to "0," occlusal contact strength will be within 8 µm of a this setting with respect to the adjacent teeth being in contact. [4] What occlusal contact strength works best for you should be determined through trial and error and based on a modest sample size of, say, five restorations. Once you find the setting you like, leave it there, as it fits your particular technique. Finally, mill your restoration, and be pleased with the reproduction of occlusal contacts where you place them, very close to perfection. Equilibration should be quick and the morphology intact (Figures 14, 15, 16).

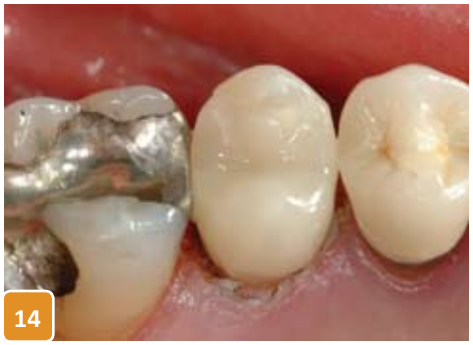
By paying careful attention to technique and using the software correctly, you will find Antagonist design technique to be rapid and precise. Best of all, everything that is generated in the proposal can be milled by the machine, and the occlusion will require little manual adjustment. Unlike Correlation, the edits performed in Antagonist will always let you know where you are in relation to the opposing tooth/teeth. I do believe this a faster and a more accurate design technique than our old friend, Correlation. Correlation has applications, but as the primary means of posterior single restoration design, our old friend may have breathed its last. ❖

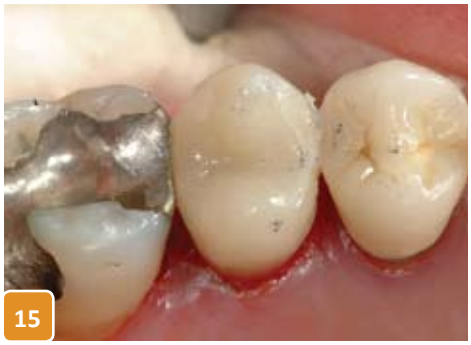

10


11


12


13


14


15

[1] Fasbinder, DJ, Poticny, DJ; Digital Occlusion Presented 2007 Academy of Computerized Dentistry Vancouver, BC, To be published

[2] Accuracy testing of a new intraoral camera. A. Mehl, A. Ender, W. Mörmann, Th. Attin; International Society of Computerized Dentistry 2009;
12: 11-28

[3] Analysis of different registration materials for single tooth restorations. Troltzsch, et al. Poster Clinic, 20YC Berlin Symposium, 2006

[4] Fasbinder, DJ, Poticny, DJ; Digital Occlusion Presented 2007 Academy of Computerized Dentistry Vancouver, BC, To be published

VITA SHADE, VITA MADE.

The Standard in Shade Guides Takes the Lead in Restorations.

Why take your chances with a restoration that claims it can mimic VITA Shades when you can reduce shade mismatch and save chair time by choosing a genuine VITA restoration? VITA Made crowns, bridges and dentures offer outstanding durability, precision fit and naturally...shade match and esthetics beyond compare. But don't take our word for it. To see the future of esthetics, request a free VITA Made Prescription kit and experience the restorations that are raising the bar on productivity and esthetic results.

877-870-VITA | www.vita-made.com

VITA®

CEREC & GALILEOS

CEREC & Implants: Part III

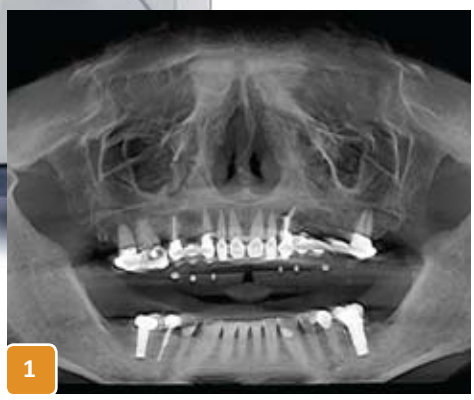
TARUN AGARWAL, D.D.S.

In the previous two issues of *cerecdoctors.com* magazine, we discussed the current modality to restore implants using CEREC, and the integration of CEREC with GALILEOS CBCT. In this issue, we are going to take a step back and look at utilizing all this great technology to produce a complex CEREC implant temporary.

(Don't worry, in an upcoming issue we'll walk a case from start to finish — including fabrication of a custom zirconia abutment with CEREC!)

Implant temporization is considered one of the most difficult temporaries to make. First, you are generally working in a surgical site and have to be extremely careful of possible site contamination. More importantly, you don't always have control of where the implant is placed, the angle of placement or depth of placement. These issues can combine to make implant temporization difficult.

Luckily, with CEREC and GALILEOS, we are moving toward a solution that will greatly reduce the surgical site, gain control of total implant placement, and allow prefabrication of temporaries.



1

With CEREC and GALILEOS,
we are moving toward a solution that will greatly reduce the surgical site, gain control of total implant placement, and allow prefabrication of temporaries.

CASE DETAILS

Our patient came to the office with a long-span FPD extending from #11 to #15, which had extensive recurrent decay on abutment #11 (Figure 1). As many of you have experienced, when the patient has decay on a terminal abutment of an FPD, you are not left with many options. The decay was so extensive that removal of #11 was necessary. Neither the patient nor I wanted to explore another FPD. Instead, we decided to look at the options for implant dentistry.

My first step in exploring implant options includes a GALILEOS CBCT scan and CEREC integration (Figure 2, following page). By combining the two technologies, I am able to review both the bone availability and the restorative positioning. This allows me to plan the implant placement in the ideal long axis restorative positioning. In this case, the patient and I are able to visualize ideal implant placement with adequate bone and restorative support (Figure 3).

Our final plan involved sectioning the current bridge to leave #15 as a single PFM restoration, removal of tooth #11 with immediate implant placement, and individual implants to replace missing #12, #13 and #14 utilizing guided surgery (Figure 4). Since this involved teeth that

Heraeus

FleXitime® Bite

Powderless scanning for use with CEREC® Technology.

Flexitime Bite delivers exceptional accuracy for standard bite registrations and superior powder-free scannability for use with CAD technology.

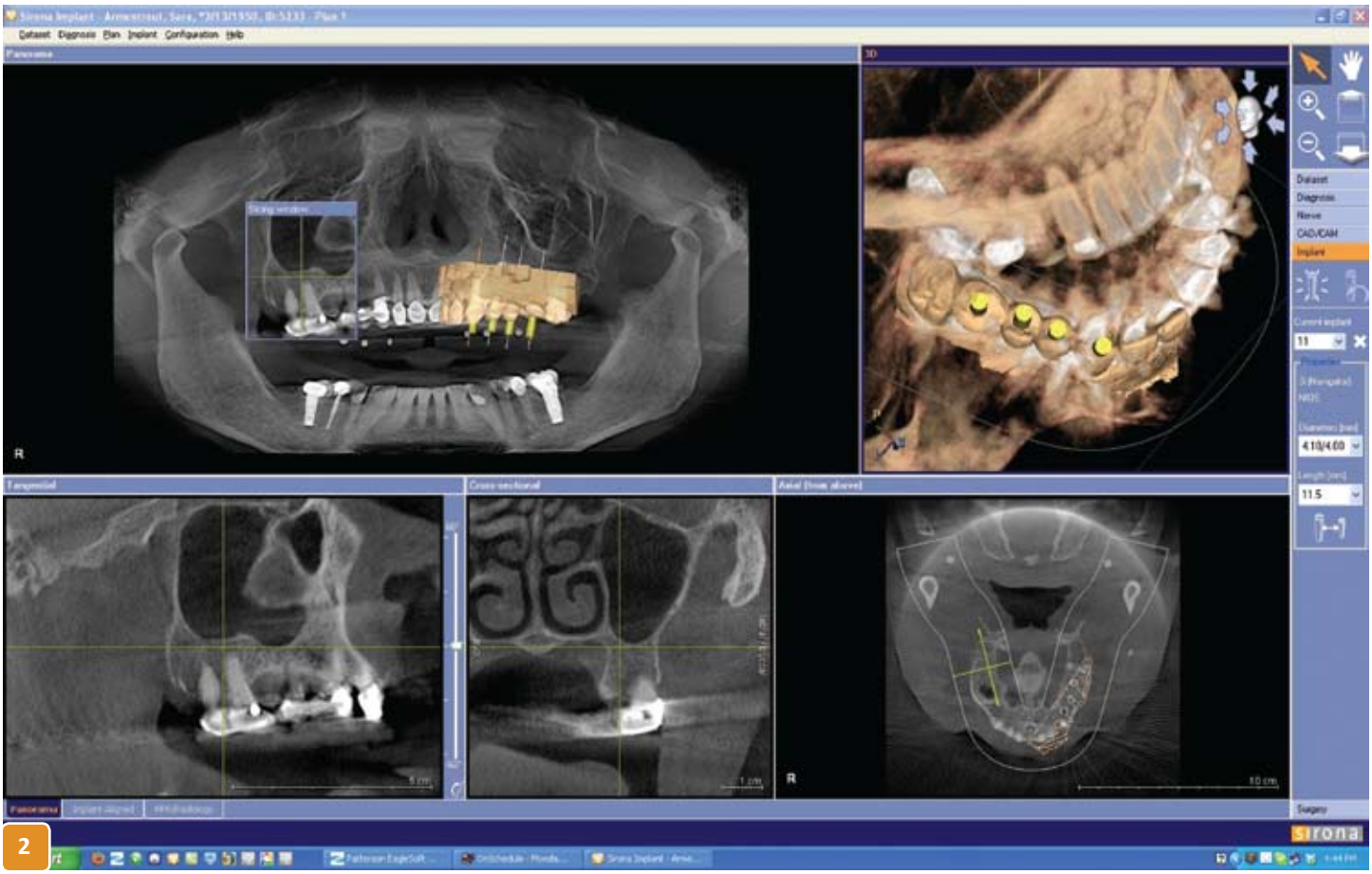
"Flextime Bite can be used without any dusting for a predictable result."

Sameer Puri, DDS
CERECdoctors.com Co-Founder

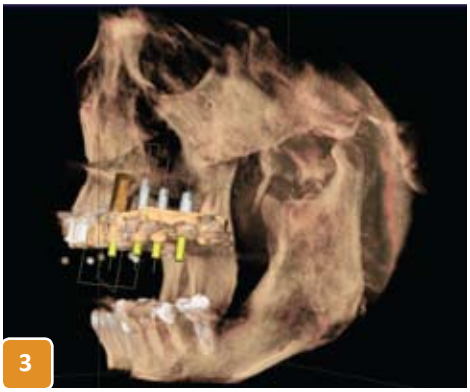
Receive a **FREE SAMPLE of Flexitime Bite at** www.heraeus-promo.com.*

FleXitime®

Flexitime® and Venus® are trademarks of Heraeus Kulzer GmbH. CEREC® is a trademark of Sirona. *While supplies last.
Heraeus Kulzer, LLC 300 Heraeus Way, South Bend, IN 46614 Phone: (800) 431-1785 Fax: (877) 271-5211 www.heraeus-kulzer-us.com www.smilebyvenus.com



2



3

4

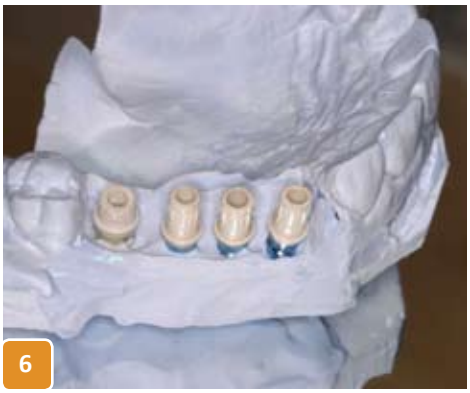
5

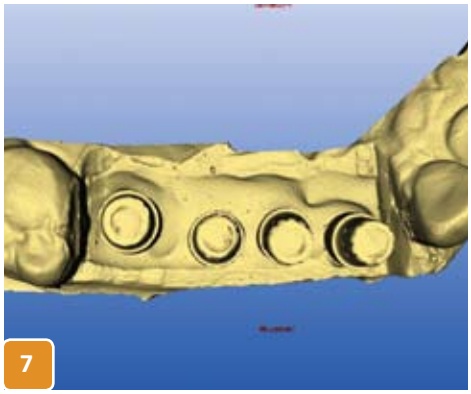
showed in the smile, the patient was adamant to have teeth the day of surgery.

THE CEREC IMPLANT TEMPORARY

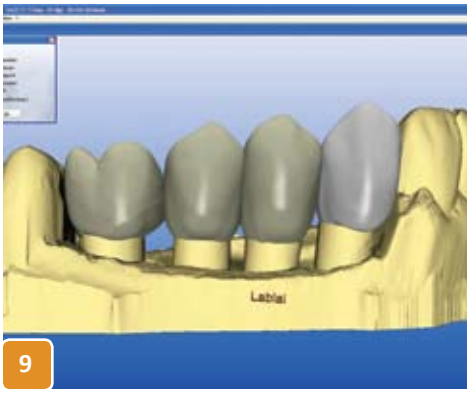
The first step in fabricating a long span implant temporary involves creating an implant level model. This can only be accomplished with accuracy when using guided surgery. Most guided implant systems come with a method to accurately retrofit the implant analog into the model, using the surgical guide (Figure 5). This will give us our working model. After creating the working model you select, customize, and place implant temporary cylinders into the model (Figure 6). From here, you are ready to fabricate your CEREC temporary bridge.

Utilizing the Bluecam, a CEREC scan of the working model with temporary abutment sleeves is completed to produce a digital model (Figure 7). A preoperative scan was also taken and "ghost correlation" (Figure 8) will be used to design our bridge. Ghost correlation allows us to utilize the preoperative widths and contours as a guide to fit our proposals. The bridge is designed and adjusted using the Form and Scale tools for ideal soft tissue and occlusal contours (Figures 9, 10).

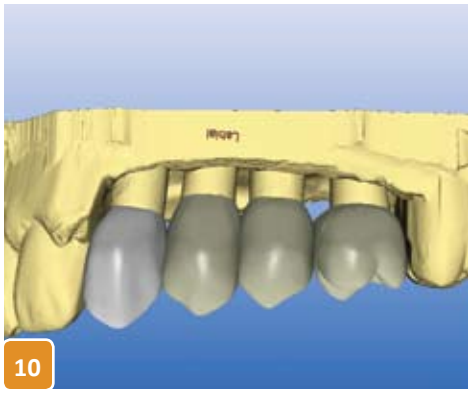

6

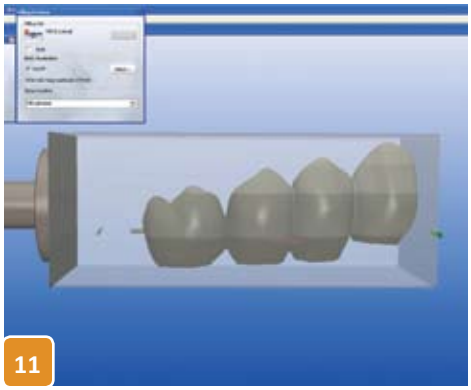

7


8

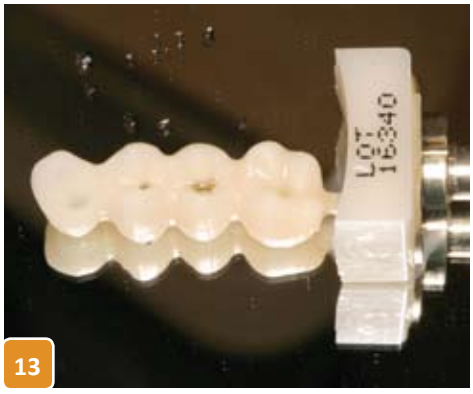


9


10


11


12



13


14

The restoration is finalized and visualized for milling using a multicolored 40mm Vita CADTemp block (Figures 11, 12). After milling, the restoration has access created to allow for screw retention, contour, and polish (Figure 13). The restoration is now ready for day of surgery (Figure 14).

CONCLUSION

This case illustrates several important techniques. First, the utilization of CEREC and GALILEOS to plan ideal implant placement. Second, the use of guided surgery not only for implant placement, but also for creating an accurate model prior to implant placement.Finally, an advanced use of CEREC for fabrication of a temporary bridge.

Hopefully, you have learned from and enjoyed this series of articles discussing implant dentistry for the CEREC dentist.

I look forward to regularly contributing to *cerecdoctors.com*, and sharing the latest news and techniques with you.

If you have any questions, please don't hesitate to contact me by email at DrA@raleighdentalarts.com. ❖

NEW FROM SIRONA DENTAL SYSTEMS

Software Version 3.8

BY SAMEER PURI, D.D.S.

The latest software update from Sirona is slated to be released in May. Titled Version 3.8, it not only is an improvement on the traditional workflow, but it also radically changes some of the traditional design techniques that CEREC owners have been used to.

Only information present at the time of print is presented in the article. For a complete and current review of all the features of the new software, please visit *www.cerecdoctors.com* for dozens of online video tutorials and a discussion board to discuss the new features.

BIOGENERIC CROWNS

This is the main feature of the 3.8 software: Crown proposals are now derived from the patient's own anatomy instead of using a pre-defined database (Figure 1). The biogeneric process looks at the adjacent teeth and antagonist (if present) and uses the anatomy present on those teeth to predict the correct form to be used in the restoration of the prepared tooth. This results in a proposal that is very similar to the remaining teeth in the arch form instead of choosing from a premade wax-up or predetermined anatomies based on a technician's wish of how the restorations should look. In addition, the anatomy of the biogeneric restoration can be fine-tuned to vary from high morphology to low morphology, giving the user additional control over the restoration anatomy.

CORRELATION

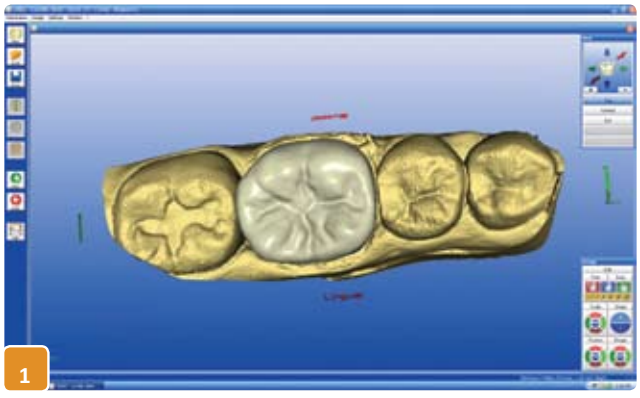
Several changes have occurred in the Correlation process, which for the most part has been the same design technique since the 3-D process was introduced. After marginating, you no longer have to draw the pink height of contour line. After marginating, you simply draw your green copy line to copy the data that you wish to duplicate, and press the green arrow forward (Figure 2). In addition to the elimination of the pink line, once the restoration is proposed, all the construction lines can be modified using the scale tool, not just the height of contour. This gives the operator the ability to not only move marginal ridges, but also cusp tips if needed (Figure 3).

REPLICATION

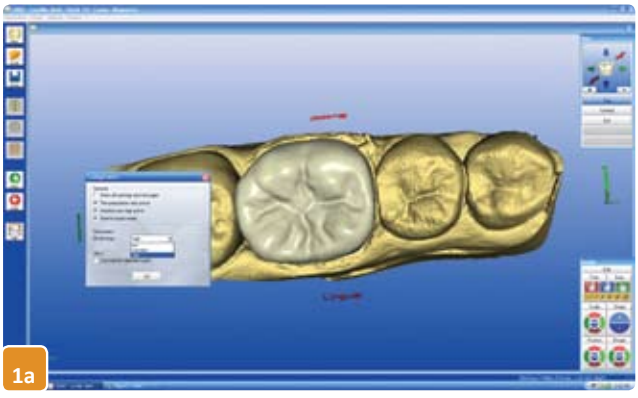
This process is completely revised from the previous replication process. Instead of drawing the green copy line, the doctor simply clicks on the tooth, and using the Biogeneric process, the software will give the proposal. Any tooth can be replicated, even those that are on a different model or wax-up (Figure 4).

BRIDGES

Bridges can now also be done in Replication instead of Database only. The same process for Replication is used to fabricate bridges as is used to fabricate single-unit restorations (Figure 5).

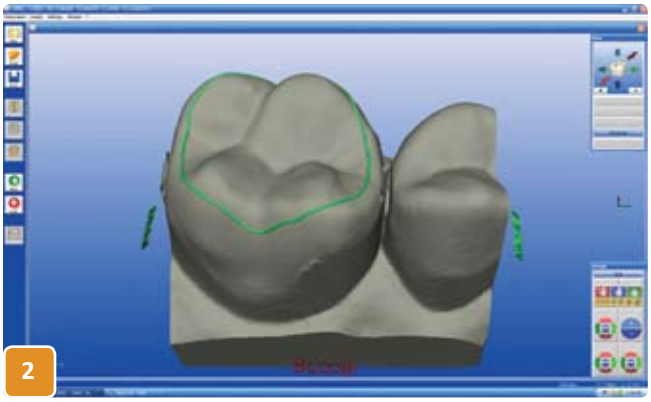


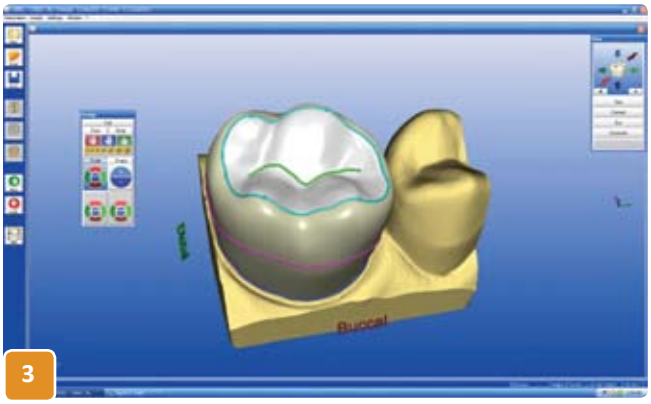
1

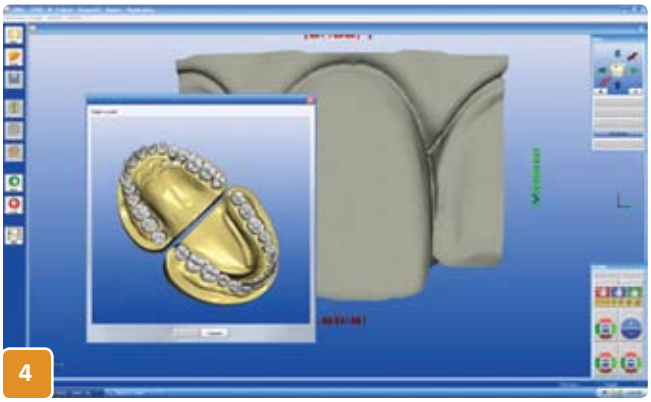


1a

» Fig. 1: Biogeneric proposals are now possible to fabricate crowns that mimic the adjacent anatomy.
» Fig. 1A: The detail of the Biogeneric anatomy can be selected in the options.
» Fig. 2: Drawing the pink line is no longer necessary in Correlation.
» Fig. 3: In Correlation, all of the construction lines are available with the scale tool.
» Fig. 4: The Replication process is completely revised and based on Biogeneric proposals.
» Fig. 5: Replication bridges are now possible in addition to straight Database.
» Fig. 6: The Buccal Bite can be used to create highly accurate proposals with exact occlusion.





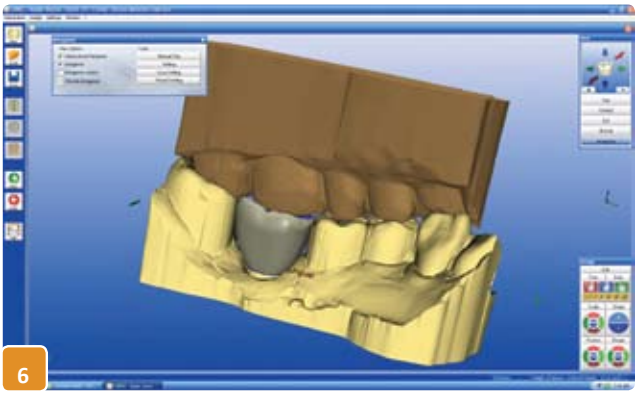


BUCCAL BITE

While this is not a new feature of the software itself, by using the Buccal Bite feature of CEREC Connect, those cases can now be imported from the Connect software into the chairside software to use the actual model of the opposing instead of the imprint of the bite registration. This allows for a more accurate occlusal scheme and fewer occlusal adjustments (Figure 6). Please see the article by Dr. Armen Mirzayan on the Buccal Bite for more information.

•

While the software was shown to the public for the first time at the Chicago Midwinter meeting, it will automatically be sent to Service Club members starting in May. Installation is as simple as placing the disk in the CEREC AC and clicking the "install" button. Complete instructions can be found on *www.cerecdoctors.com*. ❖



CLINICAL

Introducing the Buccal Bite

BY ARMEN MIRZAYAN, M.A., D.D.S.

A new software feature has recently been introduced to CEREC, through the CEREC Connect process. CEREC Connect is the portal with which chairside users can send their digital impressions to dental laboratories. The technician then has the option to either mill a ceramic restoration or order stereolithography models to fabricate layered materials, such as porcelain fused to metal crowns or even high noble gold restorations

Traditionally, the process required the preparation images and the bite registration images. Capturing the bite, particularly in the second molar area, can be technically challenging. The tongue and material handling can be contributing factors that unnecessarily prolong treatment time. With the advent of the Buccal Bite, the process is now streamlined, and often times the data can be captured in a fraction of the time.

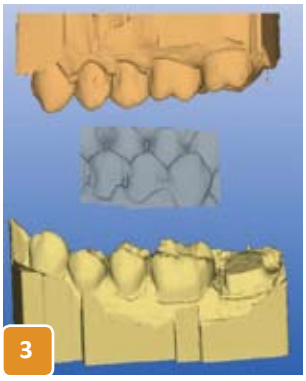
As soon as the patient is anesthetized, the buccal bite can be captured (Figure 1, facing page). The patient bites down completely, the interdigitated arches are opaqued and the optical impressions are captured. It is not necessary to capture the area of the first or second molars, as it is cumbersome to access. Generally, capturing the premolars or even the canine is adequate, as long as the opposing and preparation models incorporate the same teeth.

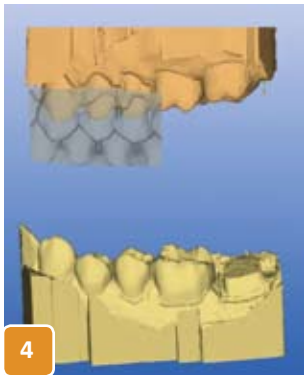
The next step is to have the patient open their mouth, where the opposing model can be scanned. By this time, the patient is ready for treatment. Once the soft tissue is retracted and the preparation is finalized, the working field is opaqued and the optical impressions are captured. Once all three required catalogs are complete (Figure 2, facing page), the next step is to articulate the arches (Figure 3).

With the left mouse button held down, the track ball moves the buccal bite model onto the opposing arch. Once it is near the teeth that it recognizes, the buccal bite automatically settles onto the model (Figure 4). After this step, the whole complex is transferred to the preparation model, where it occludes with the preparation model (Figure 5).

The next step is to verify the models (Figure 6) and to submit it to your desired laboratory (Figure 7) through CEREC Connect. The practitioner must first register to use CEREC Connect and then upgrade to software version 3.65 to take advantage of this feature. This tool is not exclusive to lab-fabricated restorations, and is available to all users.

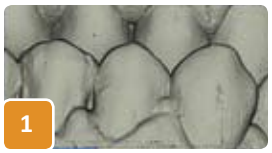
It is clear that the benefit of this new feature is the **most significant advancement in the technology since CEREC went to 3-D.**


3


4

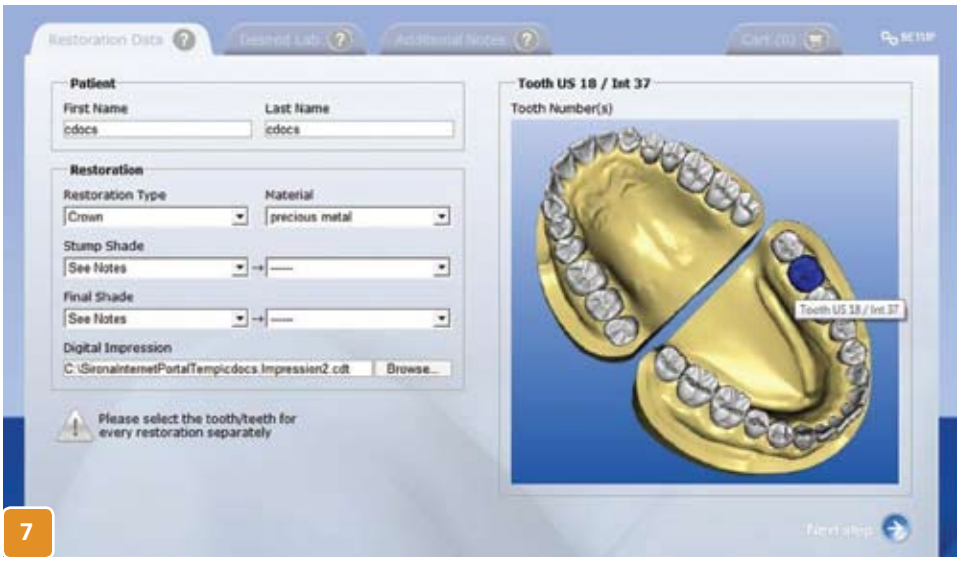

5


6



1

2



7

Its functionality is not found in the chairside software version. However, it can be imported from the CEREC Connect software into the CEREC Chairside software.

As a longtime user of CEREC, it is very clear that the benefit of this new feature is the most significant advancement in the technology since CEREC went to 3-D. Log on to cerecdoctors.com to see many sample cases of the process and familiarize yourself with the feature through videos and online exercises. ❖

CASE STUDY

Fabricating Long-term Provisionals Using CEREC CAD/CAM Technology

BY DARREN GREENHALGH, D.D.S.

One of the biggest tangible advantages to utilizing CEREC CAD/CAM technology in your practice is to prosthetically restore damaged or otherwise failing teeth, and do this all within the "game-changing" process of single-visit dentistry. Over the years, advances in CEREC chairside CAD/CAM technology hardware and software have given us the ability to fabricate many different types of restorations, which include inlays, onlays, crowns, and veneers. Recently, this technology has also given us the ability to fabricate in-office provisional bridges, easy quadrant to full-arch digital impressions, and complete digital communication with dental laboratories through CEREC Connect. These benefits are enormous, whether considering the patients or restoring the dentist's perspective. All of these advantages have been discussed and shown in previous issues of *cerecdoctors.com* magazine. One novel use that hasn't been mentioned thus far are the advantages of fabricating long-term provisionals utilizing CEREC CAD/CAM technology.

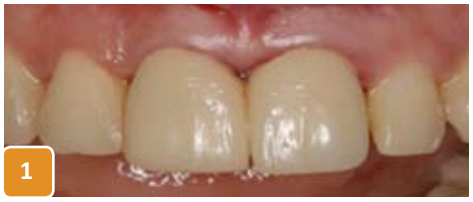
This is often overlooked – due to the fact that this process is not "CEREC sexy," or one of the many reasons why most dentists purchased this technology: to go back to multiple visits and provisionalizing.

There is a fantastic benefit utilizing CEREC technology when one-visit dentistry isn't necessarily possible or advised. A few of those considerations:

» When long-term provisionals would be better for the patient;
» Re-establishing biological width after minor perio surgeries;
» Establishing esthetics/function/phonetics prior to fabrication of the final prosthetic restorations;
» Waiting for tissue to heal in order to determine gingival architectural levels.

These situations present an opportunity for CEREC chairside CAD/CAM technology to be both a convenience for the restoring dentist and an aid to the patient.

When facing one of these long-term provisional situations, CEREC chairside CAD/CAM technology can produce fantastic provisional restorations, arguably the best provisionals that you are able to create in your practice. It does not take any more time than a traditional bis-acryl provisional – in fact, it usually will take less time to mill, cement, and clean up than a traditional provisional. A few other benefits: they are the easiest provisionals to polish, there are never any voids or bubbles resulting in remakes or touch-ups (as often happens with acrylic provisionals) and most importantly, there are never any areas of insufficient margins due to these voids or bubbles on your provisional restorations.


1


1a

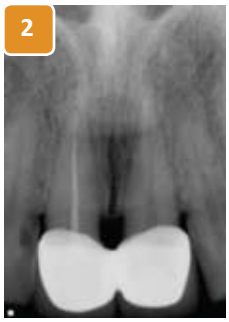
CASE STUDY

Let's take a look at a simple situation in which placing the provisionals helped both the patient and the dentist.

A 42-year-old female patient presents to my office for a comprehensive new-patient exam. Upon discussing, the patient's chief concern is intermittent pain associated with some existing restorations. During the exam, we discover various areas of failing fixed prosthetic work that has severely affected the health of the gingiva.

Notice (Figures 1, 1A) how the gingival margins around the PFM restorations are inflamed with rolled borders. The patient has lost her interdental papilla,

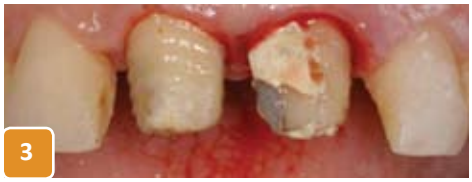
due to the splinting of the two centrals (Figure 2) and poorly placed margins. Periodontal probing depths read 3s and 4s along teeth #8 and #9, with excessive bleeding.

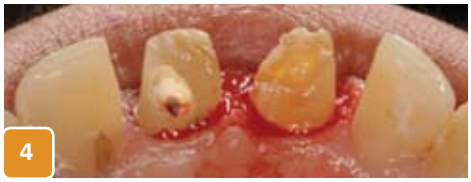


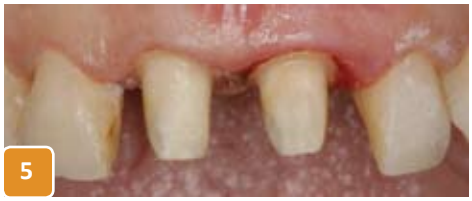
These images were presented in a treatment consultation, in order to educate the patient as to her alternatives to intermittent pain. The only unfortunate aspect of this process: she wanted it done right away. Therefore, we worked her into the schedule for the next day, but didn't acquire a pre-operative wax-up. Since the patient was going to be in provisionals, this wasn't critical; we would obtain a wax-up after the provisionals were created.

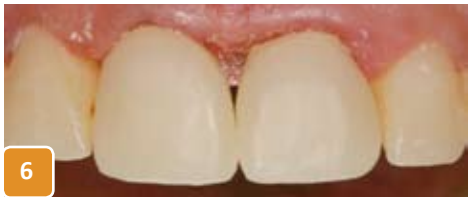
Upon removal of the two splinted restorations, one can see the effects on the gingiva of the poorly fitting crowns (Figure 3). Excess cement, recurrent decay and poor functioning build-up were removed (Figure 4).

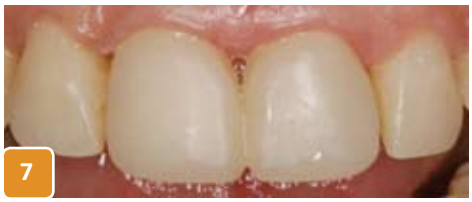
Hemostasis was controlled with much difficulty using Viscostat Clear, 00 cord from Ultradent, and an Odyssey diode laser from Ivoclar. The teeth were then built-up, utilizing Empress Direct composite from Ivoclar and Surpass from Apex Dental Materials as the bonding agent. The preparations were then finalized (Figure 5) to accommodate two temporary crowns made from digital impressions, utilizing CEREC technology and 3M z100 composite blocks. A PVS impression was also taken at this time, in order to get an esthetic wax-up for the empress restorations delivered at a later date. Ideally, this

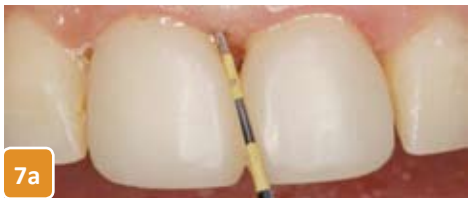


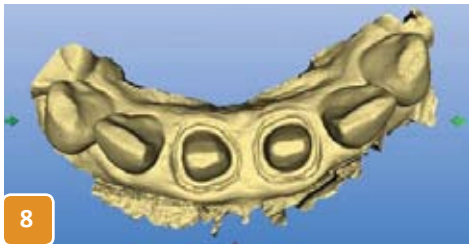












can be created within the temporaries themselves.

The patient exhibited with less than ideal esthetic proportions when addressing the space from the mesial of tooth #8 to the distal of tooth #9. We discussed the symmetry issues relating to the space, especially on the distal of tooth #9 (see again Fig. 1A). The patient opted to try and close the space, and we would re-evaluate the esthetic-related issues at a later appointment.

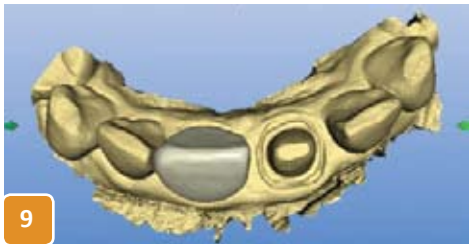
The immediate placement of both provisionals (Figure 6) showed perfect marginal adaptations, but less than ideal esthetic proportions. We purposely kept the interdental papilla open to see if we would get any incisal migration of the tissue. The patient then went on an extended family visit to Mexico for two months.

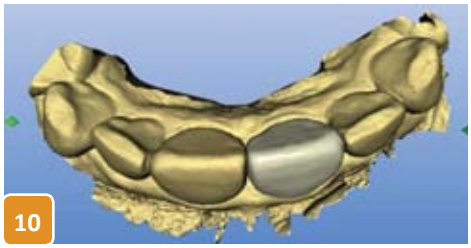
When the patient returned, she presented at the office to ascertain the health of the tissue. This appointment took about five minutes, because the tissue was in excellent shape with non-inflammation, pink, non-rolled gingiva. There was a slight change in the interdental papilla (Figure 7) with a new, slightly incisal position. When the tissue was probed, depths of 1s and 2s (Figure 7A) were discovered. There was no need to take further images — we had the initial prep images saved (Figure 8) in the database of the CEREC Bluecam AC unit. We took images of the wax-up and fabricated final restorations (Figures 9, 10, following page) for the next appointment. Empress CAD A1 Multi Blocks (Figures 11, 12) were used to produce the final restorations.

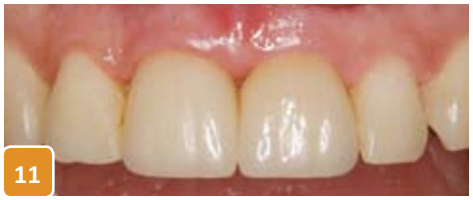
I hope you had the opportunity to attended the 2nd annual CEREC symposium, where we had the pleasure of hearing from Dr. Dean Vafiadis. He also brought up a way to use your CEREC machine to create beautifully

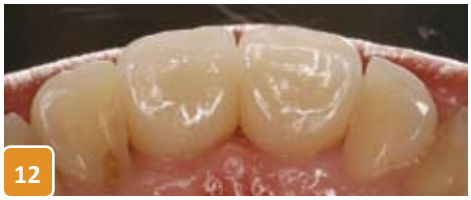
esthetic results as an immediate wax-up. He discussed a way he likes to create the wax-up, or in this case, an "ideally contoured composite" with the patient in the chair utilizing a milled restoration as his "wax-up" to align with his esthetic goals. He then uses these provisionals as the occlusal images when utilizing Correlation as the design mode.

The patient was thrilled with the fact that she hadn't had any pain with her front teeth since we placed the temporaries. We were also able to satisfy her esthetic concerns, due to spacing/diastema issues she had previously. I was thrilled because we were able to get the healthiest situation utilizing my favorite restorative tool — CEREC 3-D. ❖









Isolite™ SYSTEMS

Meet the Newest Member of Our Family – Isodry^{ti} – not as bright, just as brilliant.

Isolite™ dryfield illuminator

The Original Dryfield Illuminator

Unlike conventional lighting, Isolite puts the light source inside the mouth so it cannot be blocked by the practitioner's head or hands. With five light settings – including one that's safe for curing – perfect, shadowless illumination is there wherever you need it. And, over the life of the system, Isolite delivers all this for just pennies per procedure. Isolite – the brightest thing to hit the Dental profession in years. *$1695^{00}*

Each system works like six-in-one!

Both the Isolite and Isodry^{Ti} come with six vacuum pipes. So while you are using one, others are getting cleaned, and still others are already in your operatory for the next procedure. That means no down time for routine sterilization. It's like getting six dental isolation systems for the price of one.

Isodry™ Ti

Not as bright, Just as brilliant.

The Isodry^{Ti} was created for those who prefer to work only with external lighting rather than using Isolite's interior illumination. But like the Isolite, Isodry^{Ti} comfortably retracts the patient's tongue and cheek, protects the throat, keeps the mouth gently propped open all while providing continuous suction. *$795^{00}*

See for Yourself!

Try Isolite for 30 days, risk-free.

Call 800.560.6066 or order on line at isolitesystems.com.

Or take a video tour at isolitesystems.com/videos.

Every system comes with a 30 day money back guarantee and a one year warranty on all system components.

Isolite™ mouthpieces come in 5 patient-pleasing sizes.

Code C0310

cerec doctors.com

"I don't use CEREC without Isolite." — Armen Mirzayan, DDS, Co-founder, CEREC Doctors.com

AN INTERVIEW WITH MICHAEL SKRAMSTAD, D.D.S.

Gaining the Advantage and Making It Happen

BY MARK FLEMING, D.D.S.

Michael Skramstad envisioned a patient-friendly practice with technologies and procedures the guys down the street didn't have. CEREC made it happen.

Q: *How long have you been in practice?*

A: I've been practicing for about 10 years now. Although I rarely like to admit it because I'm a Purdue Boilermaker at heart, I did in fact graduate dental school in 2000 from the University of Minnesota. After graduation, I found a bank willing to loan a 26-year-old a lot of money, and bought an existing practice right out of the gate. Looking back at my professional career, that risky decision turned out to be the wisest I ever made. It allowed me the freedom to figure out exactly how I wanted to practice and who I wanted to be as a dentist, which is often very difficult to do the first few years out of school. I took extensive CE and formed a plan for the future. A little more than three years later, that led me to a new office, a new business partner, and CAD/CAM. CEREC turned out to be the cornerstone of the technology-driven practice that we envisioned.

Q: *What is the size of your practice?*

A: My partner, Dr. Karl Berg and I run a fairly large eight-operatory family practice. We currently have 13 employees (four assistants, four hygienists, three front office staff, an office manager, and a treatment planning coordinator). Our staff is large, but they are definitely the "heart" of the practice. Like most offices, we would be lost without our wonderful staff, and they definitely deserve a large amount of credit for contributing to our success. They run the office, which frees us up to doing what we do best, and that's treat the patients.

Q: *In what type of dentistry do you specialize?*

A: We have a busy family practice. We do our share of cosmetic reconstructions and smile makeovers, but the majority of our dentistry is "bread and butter." My day brightens up when we have a lot of CEREC restorations to do, but we are definitely busy with everything else that most offices do on a day-to-day basis. I don't think I would enjoy running a "boutique" office that only specializes in certain procedures. The variety of family dentistry and the patient interaction is what makes being a dentist such a fun and rewarding job.

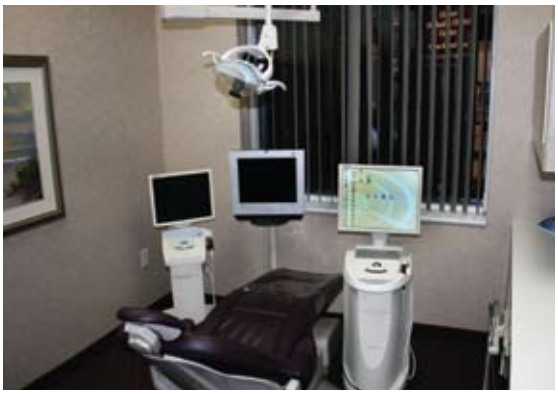
Q: *Why did you choose CEREC as your CAD/CAM choice?*

A: I was like most people who first start out with CEREC. I was vaguely interested in the technology, but didn't know a whole lot about it. I heard a lot of the negative rumors that float around the marketplace, and was very hesitant to learn more. Fortunately, my Patterson sales rep was very persistent and convinced me to attend a seminar. That moment changed my life. I was absolutely blown away at the technology… and that was more

MICHAEL SKRAMSTAD, D.D.S.

Dr. Skramstad is a 2000 graduate of the University of Minnesota School of Dentistry. He is an advanced trainer for Patterson Dental and has lectured nationally on the CEREC restorative process. Dr. Skramstad is a CEREC beta tester for Sirona Dental Systems and a product consultant for multiple dental companies. He currently is faculty in the CAD/CAM department at Scottsdale Center for Dentistry and *www.cerecdoctors.com*. Dr. Skramstad maintains a private practice in Orono, Minn., focusing on esthetic and CAD/CAM dentistry.

"Our philosophy changed from being just a modern office, to "the office" that can do one-visit crowns and veneers. That was a powerful advantage to have. All that our patients knew was that we could do their crown in one visit without an impression or temporary, and the office down the street could not."



Top photo: Michael Skramstad, D.D.S., Dr. Karl Berg, and the staff of Orono Dental Care.

Middle Left photo: CEREC machine

Bottom left photo: Operatoriy

than six years ago. I cannot imagine how impressed I would have been as a prospective owner if I saw the software and hardware for the first time as it is today.

I like to joke that I was Patterson's easiest sale. I actually had to chase down the CEREC specialist to sign the papers that day before lunch. I won't mention how our staff (and my wife) reacted to this impulsive purchase, but it wasn't pretty! I think we all look back at that little "rough patch" and laugh now. I cannot imagine where I would be personally or professionally if I hadn't attended that seminar.

As far as choices, back then there was only one choice. Now, it seems like more and more CAD/CAM options are popping up in the marketplace. After using most of these systems, I still believe the choice is fairly simple. Nothing matches CEREC's ease of use and Sirona's history, customer service, and innovation.

Q: *How does CEREC technology fit into your office philosophy?*

A: When we built our new office, we had a vision. Sometimes a vision is just that, a vision. It's entirely different to implement the necessary changes to your philosophy to achieve that vision. Our first goal was to design our office in a way to make people want to come there. Make it a comfortable place and very modern and clean. That was the easy part. Our next goal was to separate our office from others through technology. We wanted our practice to give off the vibe that we were current in all the latest technology and procedures. Most offices these days use monitors, computers, digital radiography, and intraoral cameras. To us, implementing just those changes was not enough. CEREC was the answer for us. At the time, there were very few people using this technology and it allowed us to set our office apart from them. Our philosophy changed from being just a modern office, to "the office" that can do one-visit crowns and veneers. That was a powerful advantage to have. All that our patients knew was that we could do their crown in one visit without an impression or temporary, and the office down the street could not. And believe me, they would let their friends, family and coworkers know about it. CEREC easily was the one piece of technology that changed our entire philosophy on how we care for our patients.

Q: *How has the CEREC technology impacted your practice?*

A: CEREC drives everything in our office, from procedures to marketing. I purposely do not concentrate on the financial aspects of the bottom line, but

The most effective way to handle indirect restorations

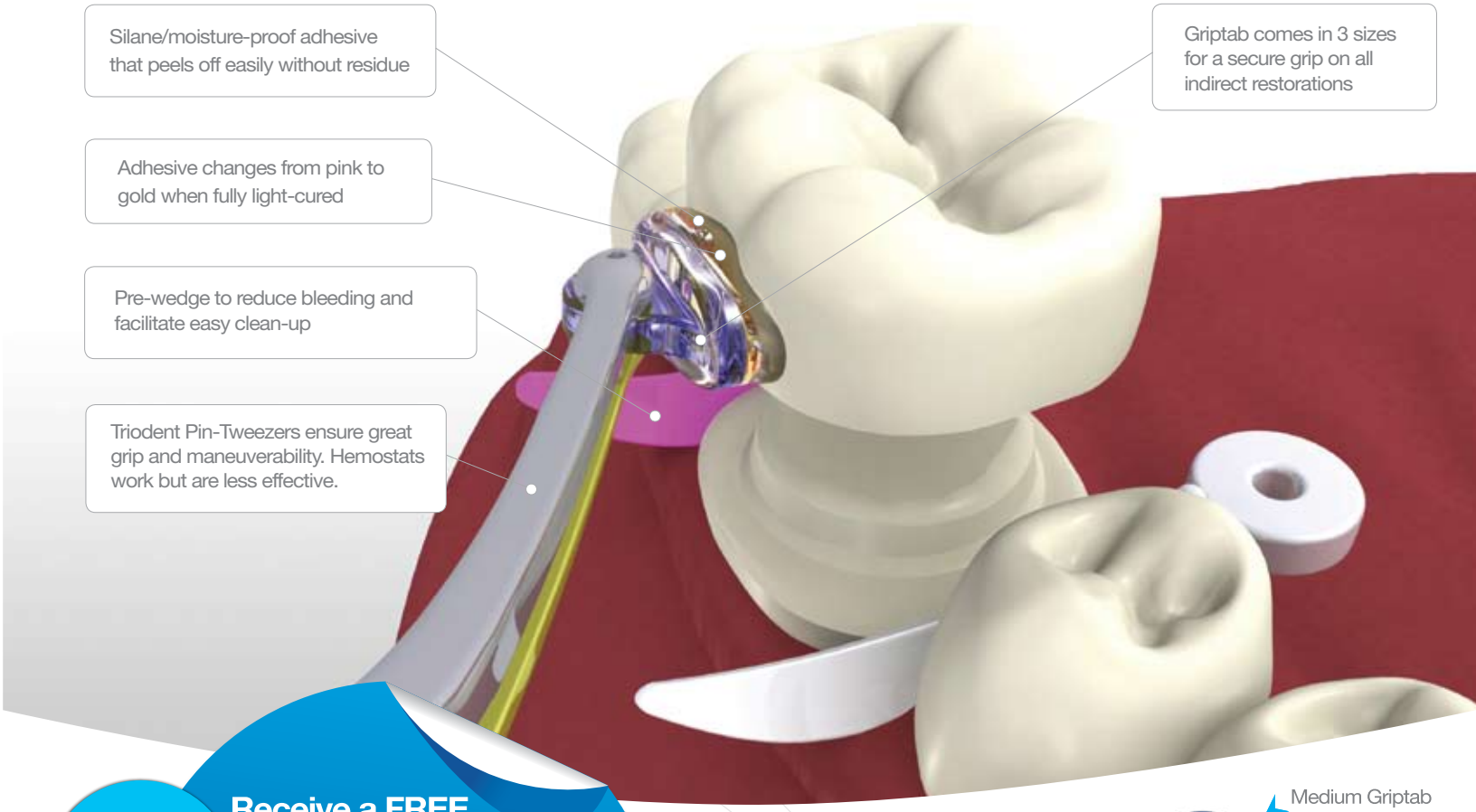
Silane/moisture-proof adhesive that peels off easily without residue

Adhesive changes from pink to gold when fully light-cured

Pre-wedge to reduce bleeding and facilitate easy clean-up

Triodent Pin-Tweezers ensure great grip and maneuverability. Hemostats work but are less effective.

Griptab comes in 3 sizes for a secure grip on all indirect restorations



FREE SAMPLE PACK

Receive a FREE Griptab sample pack. Call our friendly Customer Services Team on 1-800-811-3949 or visit www.griptab.com/cerec to order.*

Promo code: AT1031A

***Offer ends 30 April 2010**

Medium Griptab

'Works like a charm'.
Dr George Freedman DDS

'The advantage with Griptab over other 'sticky' systems is that you can pick up and put down restorations easier and without a stick in the way. Griptab is ingenious, useful and works well.'
Dr Howard S. Glazer DDS

triodent™
SIMPLE SOLUTIONS FOR SMART DENTISTS

griptab™
Reliable Grip, Total Control

Laboratory operators: We offer a full laboratory support programme. Call direct or visit www.griptablab.com

it's definitely there. CEREC has allowed us a lot of financial incentives to improve multiple technologies in our office. Without CEREC, I doubt we would be able to implement a lot of what you see in our office. It definitely was the cornerstone of building the technology-driven practice that we have today.

On a more important level, CEREC has created an environment that makes me want to come to work. I truly enjoy my job because of the technology. Our staff is involved greatly in what we do and that keeps the morale high; staff turnover virtually nonexistent. I believe patients can feel that energy when they come to our office, which is probably the very best marketing that we can ever do.

Q: *What is your favorite procedure using CEREC?*

A: This may sound a little "vanilla," but my favorite CEREC procedure is simply a single-unit posterior crown. It is probably the easiest restoration to fabricate, but I absolutely love

the reaction and excitement that my patients get out of single visit CEREC restorations. I am constantly amazed at the response that we get when people can watch their crown being made. Their excitement is infectious and it affects my office in a tremendous way.

On a personal level, my favorite procedures are anterior restorations. I love the challenge and control of using photography and staining/glazing to produce lab-quality esthetics in a single visit.

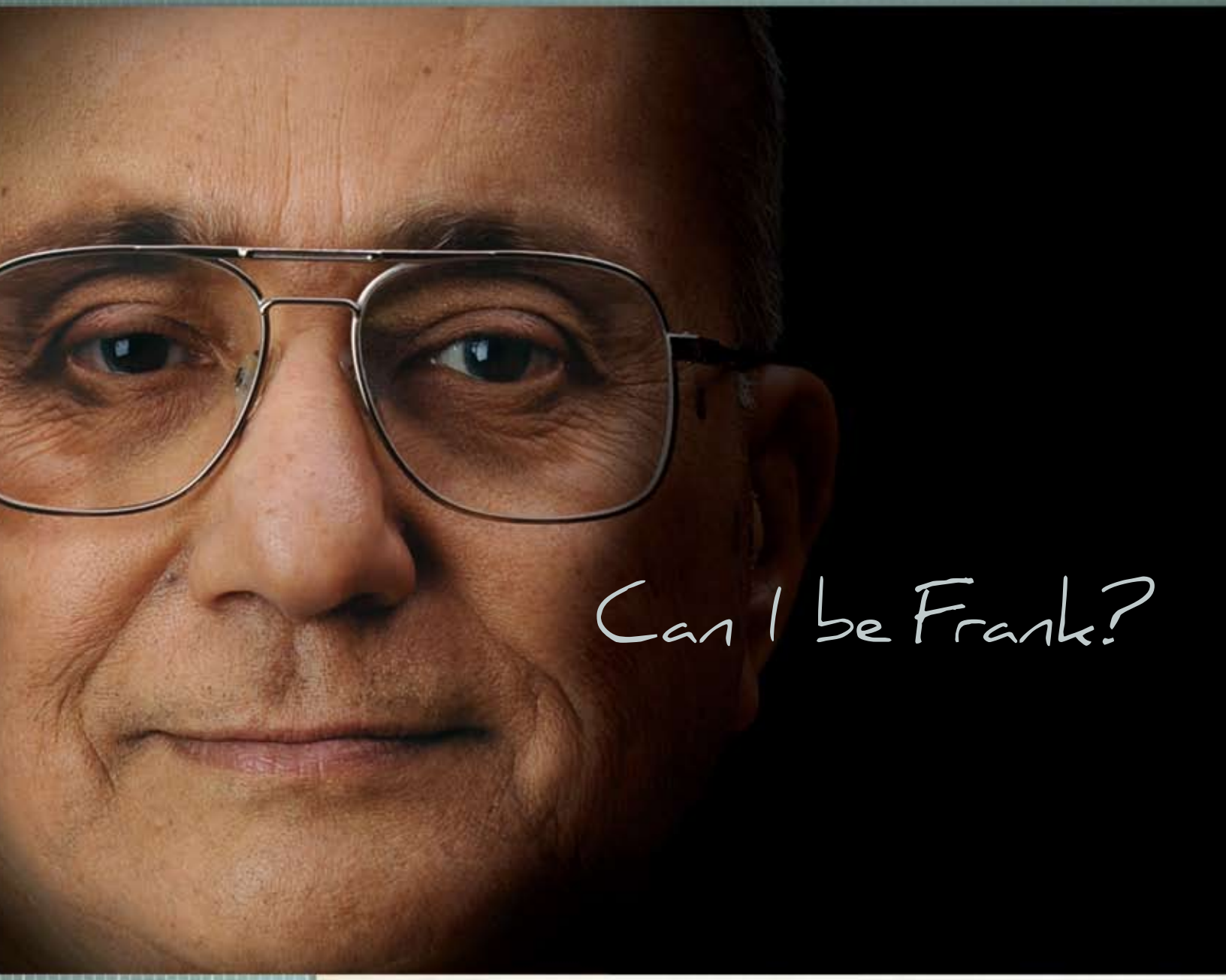
Q: *What is your most unique CEREC procedure?*

A: You do realize who you are talking to, right? I have been known for trying lots of ridiculous things. The amount of hours I've spent experimenting and tinkering with the CEREC would be a little sickening to think about! This is what I enjoy the most, though. Trying to figure out applications for the CEREC that can help myself and others take advantage of this great technology. Some of the more unique procedures that I've done with the CEREC machine are: Designing and milling an NTI appliance and fabricating an impression-free permanent bridge prior to CEREC-connect.

Q: *If someone was to take your CEREC away today, you would …*

A: The first thing I would do is call Sirona and see if they were hiring! If I couldn't use CAD/CAM in my office, I would be out there promoting it and continuing to train people on the technology. It is really the main thing that motivates me in dentistry. I enjoy not only delivering high quality restorations, but also the challenge of beta testing, and the excitement of what the future may bring.

Honestly, I could not practice without CEREC. Not only because I firmly believe in the technology, but because it is the "lifeline" of my office. Without CEREC, our office just does not work. We have created an atmosphere of excellence and expectations because of CAD/CAM technology. Neither my staff, myself, nor my patients could ever go back! ❖



I wish I had met Frank Spear when I was starting out. Colleagues said he was good; what an understatement. He exceeded all my expectations and - after 43 years in practice - Spear seminars gave me a new perspective.

Kalyan Chakravarti, DDS
Faculty Club Member

3-2-09

speareducation.com
866.781.0072

SPEAR EDUCATION

HAPPENINGS IN THE CAD/CAM WORLD

The Road to the Super Bowl

BY SAMEER PURI, D.D.S.

For me, dentistry has never been more fun. Yes, that boring old profession with the supposed highest suicide rate that our non-dental friends love to remind us about. That profession where the only thing patients hate more is a trip to the proctologist for their annual colon exam. That profession that conjures up images of big needles, sharp instruments and pain in the minds of consumers. Yes, that profession, for me has never been more fun.

Why is it so much fun, you ask? It's actually quite simple. A little fresh paint at the office, the new Sirona dental chairs, the Galileos, the Zeiss microscope and other goodies that we incorporated into our day-to-day routine at the practice.

Throughout my career, what has kept my mind fresh and kept me from being bored have been all the new things that I have been fortunate to be involved in. After graduation from dental school, it was the new practice that I joined as an associate, and eventually bought. Then it was joining the online discussions at dentaltown.com, and being one of the co-founders of the Townie Meeting. After that came the CEREC and my experience as a CEREC beta tester and trainer. That evolved into creating *cerecdoctors.com*, and eventually meeting Imtiaz Manji and being asked to join the faculty at Scottsdale Center. And most recently, the newly remodeled office. All of this while running the practice and balancing family life has certainly led to challenges.

Despite all of these amazing experiences, the next adventure could quite possibly top them all.

We all love our CERECs; we rave about the process and product to patients, but often it feels that we are shouting at the top of our lungs and no one is listening to the great benefits of a CEREC dental visit. Mind you, it's not that they don't care, it's just that they don't realize what it means to have their onlays and crowns finished in one visit instead of two.

Wouldn't it be great to let the whole world know what incredible technology we have access to?

I don't have to tell you guys what the benefits would be to all of our practices if CEREC became a household name, similar to XEROX or Kleenex. Well, it already is that in the dental world, but imagine the possibilities for all dentists if it became the norm to the patients. Maybe then patients would associate dentistry with something modern, something high-tech instead of the tired old clichés of the highest suicide rate.

I had hoped that the ADA would step forward and promote all of dentistry. We have waited for Patterson and Sirona to take the lead. Unfortunately, everyone has been too busy with their own projects and agendas to do anything about this. The time has come to change this. It's time for we CEREC doctors to take the lead. It's time to create a grass-roots effort to bring a CAD/CAM message to the masses.

Wouldn't it be great to let the whole world know what incredible technology we have access to?
It's time for CEREC doctors themselves to take the lead.
It's time to create a grass-roots effort to bring CAD/CAM message to the masses.

(CONTINUED ON PAGE 48)

Introducing Our New Line of Spear Education Procedure Systems

Taught and Used at Spear Education

K0181
Provisional
Trimming Kit

K0182
Acrylic
Appliance Kit

K0184
Extra-Oral
Porcelain Polishing
Dialite®

K0185
Intra-Oral
Porcelain Polishing
Dialite®

K0187
Anterior Tooth
Preparation System

K0190
Equilibration Kit

K0186
Posterior Tooth
Preparation System

K0191
Provisional
Polishing Kit

SAVE 50%
Call for Special Pricing

Expect the Best. Buy Direct.

To order call 800.841.4522 or fax 888.610.1937.
In Canada call 800.363.3838 or fax 866.330.4454.
Visit our website: www.BrasselerUSA.com

BRASSELER USA®
DENTAL INSTRUMENTATION

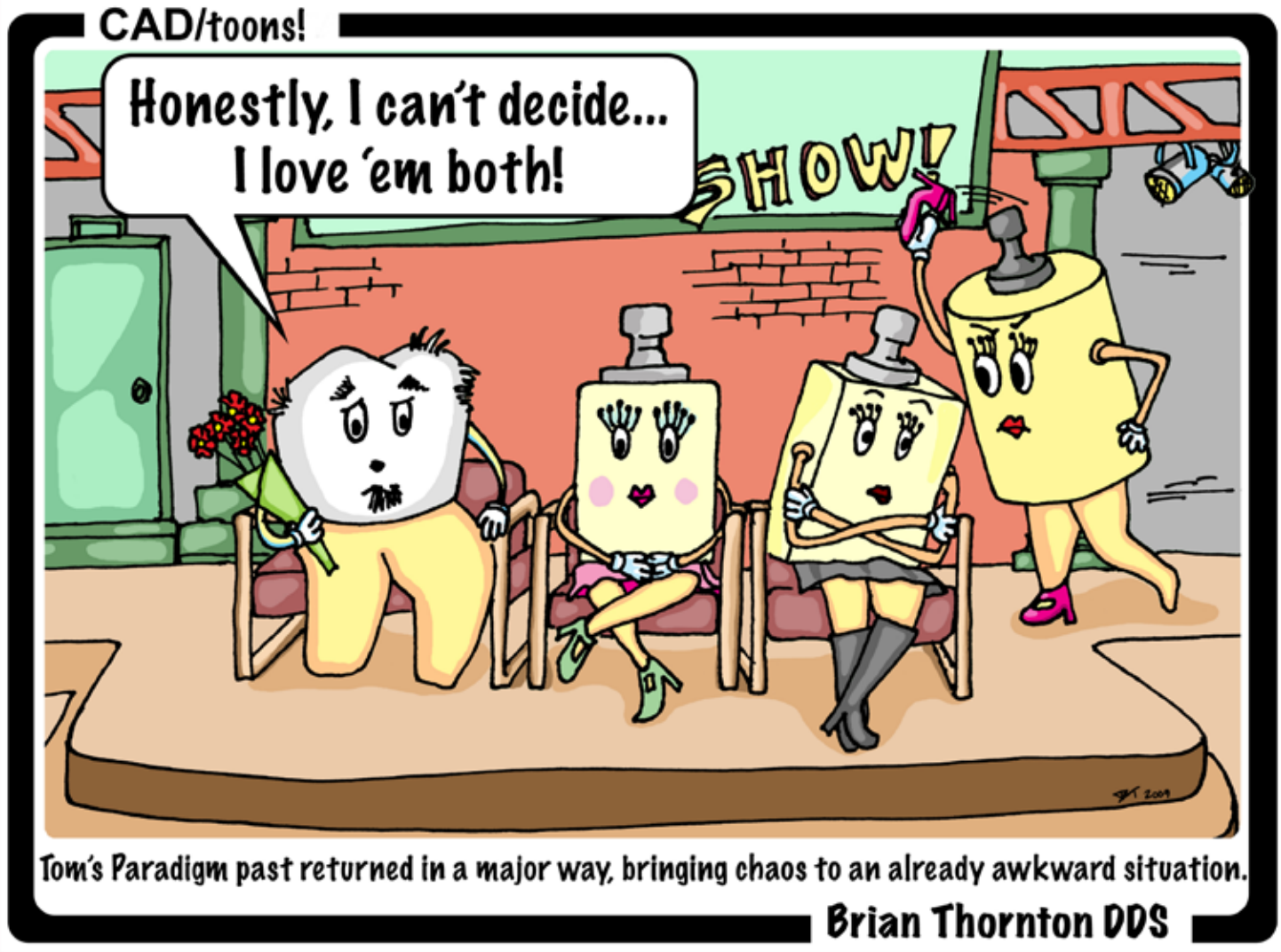
B-3357-02.10

Now hear me out. This idea is nothing small. It's big. It will take determination, it will take perseverance, but if we CEREC owners band together, then it's possible. It will cost money, but I'm not talking thousands of dollars a month. If 10,000+ CEREC owners in the U.S. band together and pitch in a few hundred dollars a month, think of the impact we could have. If proper promotion and marketing can make Lumineers a household name, why not CEREC? If we get enough doctors together, we just might be able to afford a spot on sports' biggest stage: A Super Bowl commercial.

Talk about impacting the consumer market; there is nothing more effective than a Super Bowl ad. A Super Bowl ad costs a few million. But with enough owners, and enough money, anything is possible.

It's time to unite. It's time to show the world the benefits of the CEREC. Join me, and let's take CAD/CAM to the masses.

Go to *cerecdoctors.com*, click on "Make CEREC a Household Name." You'll find more information and an online poll to let us know your level of interest. ❖



FRANK SPEAR DVD LIBRARY

Four Categories and a Lifetime of Skills

speareducation.com/dvd

Ib Implants + Bridges | Cp Case Presentation | Re Restorative | Oc Occlusion

ORDER ONLINE spareducation.com/dvd | SAVE 10%

SPEAR EDUCATION | 1.866.781.0072

Academy of General Dentistry PACE Program Approval for Continuing Education

Scottsdale Center for Dentistry is an ADA CERP recognized provider.

ADA C·E·R·P® Continuing Education Recognition Program

Get Connected...

...with the first lab in CEREC Connect.

DENTATRUST

www.dentatrust.com

REGISTER TODAY!
www.scottsdalecenter.com
866.781.0072

level 2

Taking The Next Step: Master Mode Education

16 CE Credits No Prerequisite
$2,500 - Two Day Workshop

Mark Fleming, D.D.S., Darren Greenhalgh, D.D.S., Sameer Puri, D.D.S. & Armen Mirzayan, M.A., D.D.S.

MAR 19 - 20 (Sold Out)
APR 29 - 30
JUN 11 - 12
AUG 6 - 7
SEPT 16 -17
OCT 15 - 16
NOV 5 - 6

level 4

Advanced Anterior CEREC Mastery

16 CE Credits No Prerequisite
Level 3 Completion Highly Encouraged
$2,950 - Two Day Workshop

Sameer Puri, D.D.S., Armen Mirzayan, M.A., D.D.S. & Lee Ann Brady, D.M.D.

MAR 26 - 27 (Sold Out)
MAY 1 - 2
JUN 11 - 12
JUN 25 - 26
JUL 24 - 25
SEP 18 - 19
OCT 15 - 16
DEC 3 - 4

The Business of CEREC

11 CE Credits No Prerequisite
$1,495 - 1.5 Day Workshop

Sameer Puri, D.D.S. & Imtiaz Manji, CEO

JUL 22 - 23

level 3

CEREC Posterior Proficiency and Clinical Integration

16 CE Credits No Prerequisite
Level 2 Completion Highly Encouraged
$2,950 - Two Day Workshop

Sameer Puri, D.D.S. & Armen Mirzayan, M.A., D.D.S.

MAR 26 - 27 (Sold Out)
APR 29 - 30 (Limited Seats)
MAY 1 - 2
JUN 25 - 26
JUL 24 - 25
AUG 6 - 7
SEP 16 - 17
SEP 18 - 19
NOV 5 - 6
DEC 3 - 4

LEARN FROM THE BEST.

Sameer Puri, D.D.S.
Co-Director, CAD/CAM

Armen Mirzayan, MA, D.D.S.
Co-Director, CAD/CAM

Lee Ann Brady, D.M.D.
Faculty, CAD/CAM

Academy of General Dentistry PACE Program Approval for Continuing Education

Approved PACE Program Provider
PAGD/MAGD Credit
Approval does not imply acceptance by a state or provincial board of dentistry or AGD endorsement (4/1/2008 to 3/31/2012)

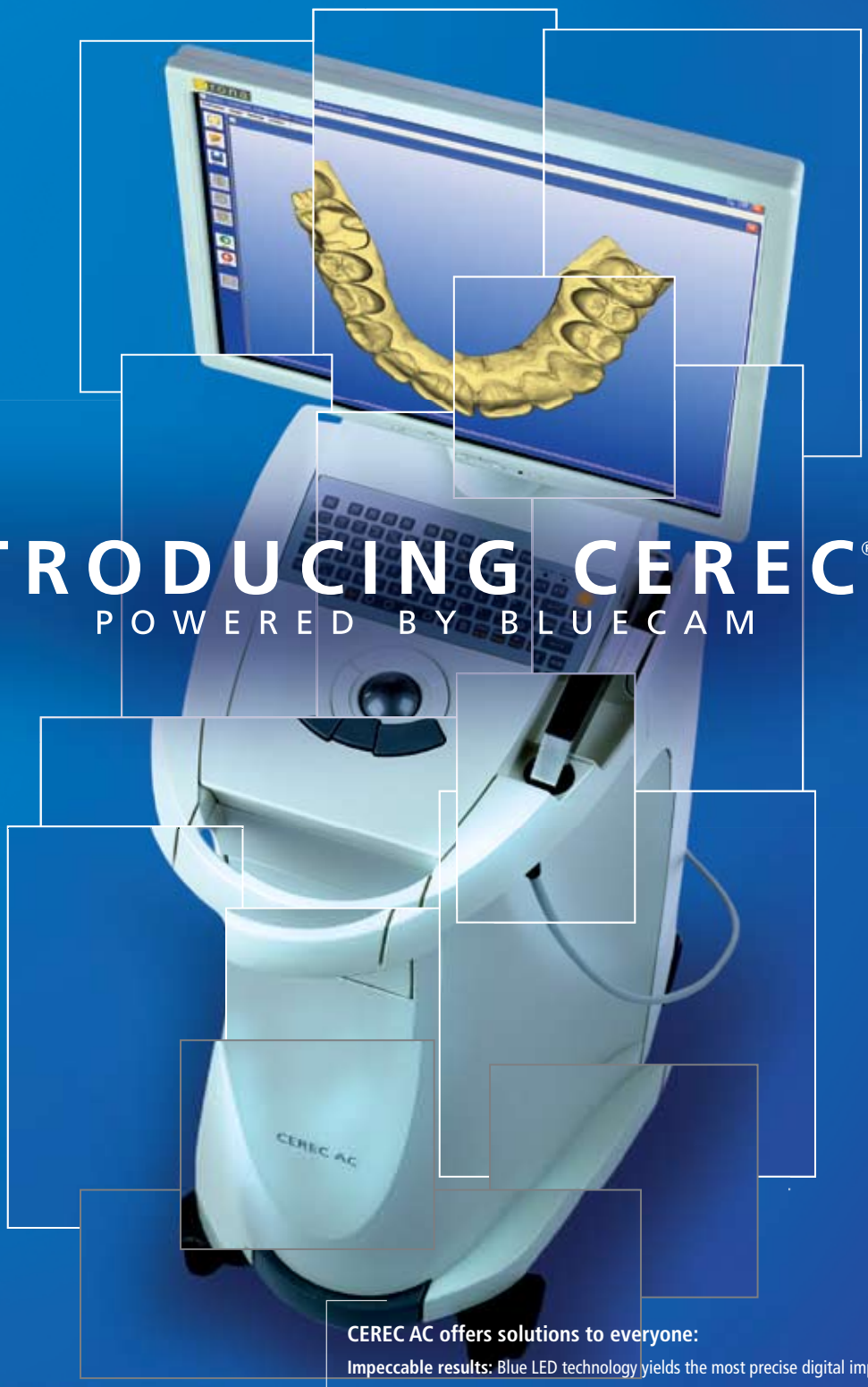
Scottsdale Center for Dentistry is an ADA CERP recognized provider.

ADA C·E·R·P Continuing Education Recognition Program

0110_07CERQ1

INTRODUCING CEREC® AC

POWERED BY BLUECAM



CEREC AC offers solutions to everyone:

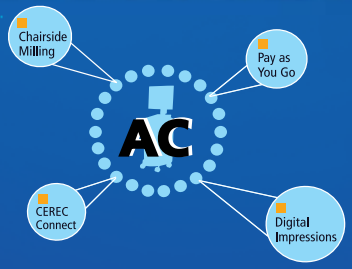
Impeccable results: Blue LED technology yields the most precise digital impressions available

Enhanced speed: Half-arch digital impression in 40 seconds; full-arch in under 2 minutes

Versatility: A system configuration for every entry point, including an economical "Pay as You Go" option

Future-thinking platforms: Access to CEREC® Connect, the world's largest digital dental network, plus integration with future dental technology advancements

CAD/CAM FOR EVERYONE



Contact your CEREC Specialist for more information: 800.873.7683
Visit us online for more information: www.cereconline.com

Treatment Centers | Instruments | Imaging | CAD/CAM

sirona
The Dental Company

Clear the final hurdle.....

Flawless Delivery

Cement

anchor

Bond

SURPASS

Etch/Silanate

interface

Call to speak with one of our CEREC® specialists today: 877-APEX-123

APEX
Dental Materials, Inc.

www.apexdentalmaterials.com