



Digital art helps patients accept treatment

by Lorin Berland, D.D.S.

A patient's ability to visualize how his or her appearance would change with cosmetic dentistry can play a major role in making decisions about whether to proceed with treatment. But what happens if you're not a skilled photographer or aren't inclined to master a cosmetic imaging software program? In this report, Dr. Lorin Berland describes his approach to case presentation and why he eventually decided to outsource much of his imaging work.

He also discusses why he uses imaging to help patients understand tissue contouring and other aspects of treatment as well as the role these images play in influencing treatment decisions. Finally, he reports on a bipolar electrosurgical system he uses to conservatively remove tissue during treatment in certain appearance-enhancing procedures.

For years, I had one major persistent problem in my practice—difficulty in getting my patients to understand the benefits of cosmetic dentistry. Too often, many of them would say “yes” to routine dental procedures like restoring broken teeth or alleviating pain but would balk when it came to smile-enhancement procedures.

Usually, money was not the issue. These patients simply could not comprehend the benefits of an improved smile or were afraid to make permanent

changes to their appearance without really knowing how it would look.

This was disconcerting, given that I began developing my clinical skills years ago using the then newest restorative technologies (ceramic-bonded-to-tooth restorations) and was getting predictable, conservative and esthetically pleasing results. But as I soon discovered, clinical excellence alone wasn't enough to motivate new patients to get started. It seemed as if I had peaked with elective anterior cases at about 10% to 15% of my gross production and I couldn't go any further.

Another less glaring but still troubling problem was understanding what my patients expected as a finished result. Sometimes they were happy and sometimes they were less happy with my cases, and I didn't seem to be able to predict that in advance. I sensed that if I could lick those two problems, my life would be a lot easier.

In the late 1980s, I saw one of the first in-office cosmetic imaging systems demonstrated at a trade show. It seemed as if the technique of showing people how they could appear before starting a case would be a major step toward solving my problems, so I purchased one of them. It did what the vendor said it would do, but neither my staff nor I could navigate the basics and produce decent pictures. It wasn't a matter of the computer or the program. It just took much more time and expertise than we expected to create images that were presentable to my sophisticated clientele.

In retrospect, I see that what was true then is just as true today: Digital art isn't something that can be mastered in a day or two. Just like dentistry, digital art (cosmetic imaging) takes a combination of experience and skill. We felt guilty and stupid because our vendor made it seem as if we should know how to do it. Now I realize how silly that was. After a few cases, we gave up trying, saying “who needs it anyway.”

Simplified imaging

Following my first expensive and demoralizing experience with cosmetic imaging, I vowed never to use it again. However, a short while later I saw an ad for a cosmetic imaging service in a journal and gave it a try. (It's my nature; I just can't help trying new things.) The concept of outsourcing our imaging appealed to me because it seemed to be cost effective and wouldn't intrude on our office routine. All we had to do was send out a full-face print and their team of professional dental artists created and printed the "after" pictures for us. Shortly after I tried the



I have more than 1,000 imaging folders circulating among my patients. So, it's no wonder interested patients are calling us daily.

service, I realized how effective this approach could be.

Patients became far more likely to accept my treatment proposals. The system wasn't flawless, however. It was a hassle developing the film and getting it out to the lab. I found it especially annoying when we would develop our film and discover that our pictures were not acceptable. We were looking for flattering portraits, but often we were disappointed with our results. It was frustrating because we never knew what was in the camera until the images were developed. Looking back on it, I realize that our experience was natural, given that neither my staff nor I were close to being professional—or even good—photographers.

When my imaging service bureau came out with its first all-digital concept in 1995, I saw great potential in this approach and became an advisor to the company. With this system, pictures could be viewed on screen immediately. The pictures could then be transmitted electronically to their studio for imaging. Plus, this system was easy to use, even for inexperienced office personnel.

It took only seconds to grab a picture and store it on a terminal. Now, we were able to send pictures out for imaging at our leisure. We soon began taking scores of pictures.

How we present cosmetic procedures

Today, our staff takes pictures of every adult patient who enters our practice. The reason: We've learned that the more pictures we take, the more business we get. We also ask questions to determine each patient's potential interest in smile-enhancement. Later on, we decide if we want to send out the picture for imaging.

Typically, the people interested in smile enhancement in our practice are women over 40 and men over 50. To help get the conversation started, we show these patients a series of "before-and-after" pictures of mature adults, which our service bureau provides.

We have found that it's usually best to send top-quality before-and-after full-face prints to our patients at home. We use a high-quality photographic printing system that home-style ink jets can't begin to rival. Sometimes, I also send pictures attached to e-mail for effect and then send

the prints on to the patient as well. The best part of doing it this way is that we aren't present to confront people as they make their decisions about whether to proceed.

Most of our patients like to show the pictures to family and friends and get some input from them when making the big decision. I have had more than one patient call and say they wanted to purchase that new smile for their wife, husband or sweetheart. What a great way to start a case! Sometimes, we call patients at home and ask them if they want to see any more pictures. Usually, though, we just wait for them to call us, which they do when they are ready.

I now have more than 1,000 imaging folders circulating among my patients. So it's no wonder interested patients are calling us daily. Some of them were imaged a year ago or more. It just took them a while to be ready to go ahead. The average time from taking the pictures to getting case acceptance is about two years. Some call us right away and in other cases it could be five years until they are ready. What's the difference, so long as they call our practice? It costs as little as \$35 per work-up, which includes the folder, duplicate pictures for the chart and e-mail. I do not charge the patient for this service. It is included in the examination, diagnosis and treatment planning.

My case presentation consists of sending cosmetic imaging to my patients at home. What's shown in the pictures is what they are buying. They expect us to take care of the details just as you would expect a builder to take care of the details as you construct your dream house. When they come in to speak about the case, patients usually

imaging



HOW WE HELP PATIENTS FRAME THEIR SMILES

It's been said that gingival tissue helps frame a patient's smile. If this is so, I believe we need to help patients see not only the artistry that will go into restoring their teeth, but the border that surrounds their new smile as well.



The patient as she currently appears.

In case planning, we always consider the role of gingival contour when it comes to the overall success of cosmetic cases. Just a small discrepancy in gingival height can make all the difference in helping patients decide to proceed with treatment.

The images shown here illustrate the role tissue contour plays in the overall result. I have found that cosmetic imaging is the key to diagnosis and planning when it comes to this component of the case.



The same patient as she could appear with dental restoration but without gingival contouring (simulation).

First, it's difficult for me to see exactly which gingival changes will create the best result. Just as important is the patient's awareness of the value of the procedure. After all, it's their money and their appearance at stake. Most patients are reluctant to authorize gingival alteration until they actually see the benefit. That's why I frequently show them esthetic imaging pictures of their proposed result both with and without gingival changes.

Patients like the idea of deciding for themselves what will be done, and it makes my job easier and the outcome more certain. Cosmetic imaging helps my patients see for themselves how gum lifts can make the difference between a satisfactory case and a great case.



The patient as she would appear with dental restoration and gingival recontouring.

I've also been successful in proving to patients that adjusting tissue height can be a painless and quick process. I've found using a bipolar electrosurgical system a real breakthrough in giving me the ability to deliver the case according to plan. This system uses special circuitry and wave forms originally designed for neurosurgery to give me a level of control no other method can match. I get tactile feedback missing in lasers so I can cut more precisely. I've also found healing more predictable with this instrument than with any other I have used to date, and I've used monopolar electrosurgery and diode lasers.

Unlike lasers, there is no need for special eye protection. In monopolar units, the electricity flows out from the tip through the body and requires a grounding place. With the bipolar unit, the electricity is confined to the electrodes. No current is spread and thus no plate is needed. It cuts clean without charring tissue or sparking. I find it works well around tooth, bone, metal and implants. The cost of the equipment is reasonable (around \$3,000), so I can afford to have one ready and at-hand in each operatory. Best of all, it can be used under water spray so there is no smell of burning flesh. My patients love it, even though they don't know much about it. The reason: Their cases look great and post-operative healing is quick and painless.

talk with my office manager, Jackie. She encourages them to ask questions. Those questions almost always center on money, time and longevity—rarely on technique. When they are finished, she asks, "Is there any reason you wouldn't get started now?" and tries to accommodate them as much as possible. Some people agree to pay us on the spot and get started right away and others don't want to start for awhile. That's how it is with all sales! Meanwhile, I haven't lost any production time.

Planning the case

The cliché, "If you don't know where you're going, you probably won't get there" is particularly true in cosmetic dentistry. I have heard so many lectures about smile design, but the speakers always leave out the most important element: What does the patient want? After all, it's the patient's money and the patient's appearance that's at stake. I have found that there are differences in taste when it comes to smiles, just as there are when it comes to art, fashion or interior decorating. That's why I believe it's so important to listen to our patients and involve them in the plan.

In my office, we plan cases by showing patients their own full-face portraits with one or more smiles that we think are attractive. Then, we ask them for their opinion. Occasionally, we have to redraw cases several times in order to get a picture that the patient really likes. But that's a lot easier than having to play around after the case is inserted. We have learned that it's almost impossible to predict how patients will react to a particular result. That's why I never start a case unless I am sure my patient will be happy with the new look.

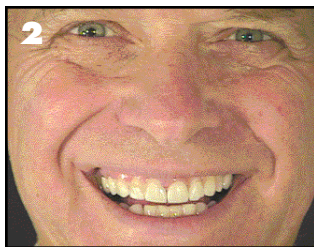
To be sure our cases come out as planned in the pictures, we use a technique called Templates for Success that give us temporaries and a finished case that consistently produce results as shown in the pictures (see Figs. 1–10 on Page 25). The concept is simple. Once the patient accepts a case and makes the initial payment, we send study models to our service bureau. They wax up the models as directed by the imaging pictures that are submitted. Next, they create a thin, transparent preparation guide over the wax-up to guide me as we work. They also produce a much-improved temporary template that gives us temps that follow the plan exactly. Now I can make perfect temps in a fraction of the time it used to take and my patients leave the office looking great. (See Figures 5, 7–9.)

As you can imagine, when patients are happy with the esthetics of a case right from the start, they will almost always be pleased with the much better final result. In

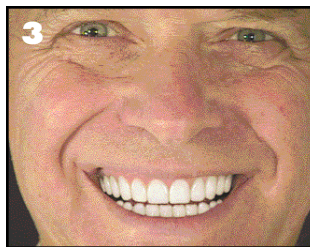


1 The patient as he appeared 15 years ago.

GETTING AN "AS-PLANNED" RESULT



2 The first set of restorations need to be replaced after 12 years.



3 Cosmetic imaging shows the patient as he wishes to appear following gingival contouring and replacement of outdated restorations. This becomes the master for the case.



4 A wax-up is created using ratios created from the before-and-after pictures. The wax-up duplicates the desired end result "as planned."

fact, I have found that people are more likely to refer if they like their temporaries.

The next day we routinely contact all of our patients to double-check the esthetics. When changes have to be made (and that does happen from time-to-time), we get them into the office, make the corrections and take a study model for the lab. From that point on, with assistance from a custom laboratory, completing the case becomes a slam-dunk. Since we began approaching our cases this way, always knowing it's going to be a success right from the start, my work is a pleasure. I no longer experience post-insertion depression!

Some of you might wonder why I take these extra steps. I do it because I find cosmetic imaging so valuable to my patients. They love to see how they will appear before investing big money for a totally elective procedure. And they aren't interested in seeing only pictures of teeth! My patients want to see themselves as others will see them—at the wedding, class reunion or business function. After all, that's what they are buying, not crowns or laminates. That's why we take nothing but full-face portraits for our cases and include the patient's hair and chin in each picture. Take the pictures too far away and they can't really see the dental changes. Too close, and all patients see are their wrinkles.

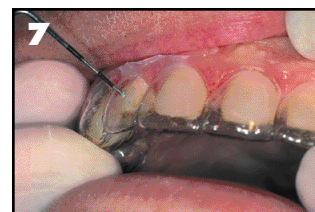
In the end, I try to give them as clear a picture as possible of how they can look if they're willing and



5 The doctor uses a preparation guide made from a duplicate of the wax-up to check preparation clearance.



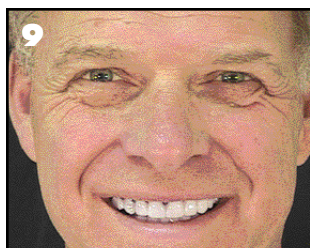
6 Gingival contouring and tooth proportion is underway.



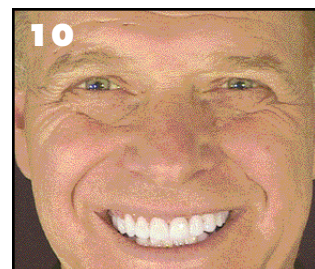
7 A transitional template made from a duplicate of the wax-up yields a breathtaking temporary in just a few minutes.



8 Resin is injected into the template and seated over the prepared area with force.



9 Temporary restorations are now in place.



10 The final case is "as planned."

ready to give themselves a better smile. ☐

Dr. Lorin Berland is an accredited member and Fellow of the American Academy of Cosmetic Dentistry. He is in private practice in Dallas, Texas, and can be reached at 214-999-0110 or at lorinberland@mindspring.com. If you'd like more information on the imaging service or temporaries process described in this article, call Dr. Larry Brooks at Smile-Vision (800-634-3480) or via e-mail at prdad@shore.



Information on the Bident electrosurgical system can be obtained by calling Garfield Dental Products at 800-469-6369 or going to the Web site www.bident.com.