An Interview With the Reigning King and Queen of Teeth Whitening

Rodger “Rod” Kurthy, DMD, has been a full-time practicing dentist for more than 28 years. He is the author of six books that teach dentists how to provide patients with innovative procedures and has also authored more than 50 dental articles. He received a commendation from the chief attorney of the US Department of Defense for his role in supporting patients’ rights in disputes with insurance carriers. Dr. Kurthy’s research and technique developments range from early clinical studies of guided bone regeneration, to esthetic porcelain procedures and bleaching techniques, to surgical repair of external resorptive lesions, to foolproof impression techniques. He also has been a primary clinical product tester for several major dental product manufacturers.

Manuela “Nellie” Vargas, RDAEF, emigrated from Mexico years ago and quickly found her love for dentistry. She received her extended-functions training at UCLA. She is active in full-time patient care, and routinely participates in numerous clinical trials as well as evaluations of new dental products for several dental product manufacturers. Nellie has a passion for teaching others, and has acted as a hands-on instructor with Dr. Kurthy at major dental meetings. She also is an Advisory Board Member for Contemporary Dental Assisting.

Shannon L. Pace, editor-in-chief of Contemporary Dental Assisting, spent a few minutes talking with Rodger “Rod” Kurthy, DMD, and Manuela “Nellie” Vargas, RDAEF, to learn more about the Deep Bleaching technique and how they work as a team during bleaching procedures.

SP: I’ve heard several refer to you and your assistant, Nellie, as the “king and queen of bleaching.” How did that happen?

RK: Well, first of all, Nellie is the most amazing assistant that I’ve ever worked with in my career of nearly 30 years. When I lecture on Deep Bleaching, I make a joke about the fact that I’ve never done a case of Deep Bleaching myself.

MNV: I worked for several dentists before I found Dr. Kurthy, and it was always difficult to answer the patients who asked how white their teeth would get or how long the whiteness would last. In most offices, the assistants do most of the whitening procedures. It was very uncomfortable wondering if we would see a good result. But now, with Dr. Kurthy’s Deep Bleaching, it’s very exciting for me because I know that every single patient, regardless of the color they start with, will have white teeth when we’re done. That really takes a lot of pressure off me, and I love how excited the patients are when we’re finished.

SP: Let’s talk about the predictability first. Nellie, what do you see as the difference in predictability of Deep Bleaching compared to other techniques?

MNV: Nellie has done every single one—including my own teeth. So when you see the amazing results, the concept and system were designed by me, but it was Nellie’s two hands and expert knowledge of the procedure that accomplished the results that I’ll show you today.

SP: Why is Deep Bleaching special? What is different about it? Why all the excitement about it?

RK: Let’s first discuss the negatives of bleaching. The first negative is the unpredictability of bleaching. You know how it is—you bleach a patient’s teeth, and you’re all very happy with the result, but then the very next patient you try to bleach—you’ve all got to use your imagination to see a real improvement, right?

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veneers, but Dr. Kurthy wanted to bleach her teeth as much as possible so that we could make the veneers less opaque. Dr. Kurthy always discusses cases with me, because we are a team. We tried to figure out a way to boost up the bleaching results for this patient. We talked about it for about 2 weeks. Well, by the time we were done, every bit of the chocolate brown was gone, and this patient had beautiful teeth that were even whiter than a B1 shade. We didn’t even need to do veneers. After having such a horrible smile all her life, when we were done she was so happy that she cried. After she left, Dr. Kurthy and I were absolutely amazed. For the next couple of weeks, we talked about what we had accomplished and how we would use it to help many other patients.

SP: Dr. Kurthy, could we show a few before-and-after images so that our readers can see what you mean when you talk about Deep Bleaching?

RK: Sure. Here are some memorable cases. This is my favorite case because this was my first tetracycline-stained case. Everybody knows how difficult—nearly impossible, actually—it is to bleach severely tetracycline-stained teeth. This patient started out as about a C8 shade (Figures 1 and 2). Keep in mind that when arranged in bleaching order there are 20 shades, from a 010 bleaching shade to a C4. So if this went from a C8 all the way to a bleaching shade, that means that this tetracycline case changed by about 40 shades. Nobody ever thought this was even possible before Deep Bleaching. Imagine how this changed the patient’s life. Think about how self-conscious this patient had always been. The next case was also a tetracycline case (Figures 3 through 5). This patient was a 48-year-old woman who simply would not smile. She heard about Deep Bleaching from a friend. She’d asked several dentists about bleaching, and they’d all told her, “Sorry, I can’t help you.” Just imagine how much fun this was for Nellie. And then imagine how this patient reacted. Imagine if your teeth looked like that all of your life—imagine your teenage years. These results are simply overwhelming for these patients. And here’s another tetracycline case. This gentleman is a high-profile attorney who flew about 3,000 miles to see us for Deep Bleaching (Figures 6 and 7). Even after all the cases that we have performed, I am still amazed to see the results each and every time. Nellie and I always take the patient outside in the natural light to show them the final result. This patient stood there in disbelief. He then looked upward, deep in thought. Nellie and I wondered what he was thinking about. After some thought, he turned to us and said, “This is the second most important thing that has happened to me in my life.” Wow! Nellie and I were speechless. He never did tell us what the first most important thing was. But to say that this changed his life is an understatement.

SP: Does this mean that Deep Bleaching is a technique that is used specifically on tetracycline cases?

RK: No, certainly not. I just showed you these cases because everybody knows how difficult it is to bleach cases like this. The bottom line is that if Deep Bleaching can do this for tetracycline cases, just imagine what it will do for your average cases. Let me show
you a few other types of cases. Everybody knows that the older a patient is, the more difficult it is to bleach their teeth. Well, this is the oldest patient that I’ve performed Deep Bleaching on. She is a 78-year-old patient. She started out as a solid C4 shade. Deep Bleaching brought her to a 020 bleaching shade—that’s 3 shades whiter than a B1. This used to be considered impossible. The number of referrals from this patient has been amazing (Figures 8 through 10). The following patient is an attorney who comes to my practice. He did not consent to Deep Bleaching until he saw the results we achieved on his wife. He didn’t believe we could actually bleach his teeth successfully (Figures 11 and 12). I have a zillion photos just like these, but I know we don’t have the room. I’ve just got to show you a patient who was a genuine pain-in-the-neck—me. These are my own teeth. I had congenitally dark teeth. Back in junior high, kids used to tease me about them. I tried to bleach my teeth twice before I developed Deep Bleaching. I was just a tad darker than the C4 shade. With Deep Bleaching, I went lighter than a B1. Nellie Deep Bleached my teeth about 4 years ago. You will see a couple of still shots from a DVD that I recently filmed. You can see that my teeth are just as white today as they were when we first did the Deep Bleaching (Figures 13 through 15).

**SP:** I’d like to say that I’m shocked by these results, but I’m not. We have been using your Deep Bleaching technique for quite some time, and we find exactly the same results. I’m the one who does the bleaching in our office, so I understand Nellie’s excitement when she does these cases. Nellie, from your perspective, what are some of the most important parts of the Deep Bleaching technique?

**MNV:** The key to Deep Bleaching is the way you make the bleaching trays. Dr. Kurthy developed a technique to fabricate the trays so that they fit far better than any bleaching tray you’ve ever seen. But if the model is not totally accurate, then the tray will not seal like it should. So, in my opinion, the most important step is taking the alginate impression. We have found that you must use a perforated metal tray. No other tray will give you the accuracy and detail at the gingival margin that you need. Unlike perforated metal trays, disposable plastic trays have sides that flare, so you don’t get the compression at the gingival margin that you need. The impression of the facial gingival margin must be excellent. The gingival line must be very sharp and clear.
easy. When you lay down to sleep, you stop swallowing as often and you don’t swallow very deeply. And, because the Deep Bleaching trays seal in the bleach and seal out the saliva, you get hours of deep penetration of the oxygen every night. The trays by themselves will not get teeth as white as (the pictures) Dr. Kurthy showed you, but the deep penetration of the oxygen is what allows the next steps in Deep Bleaching to really cause the big boost in whiteness.

SP: What is it about Deep Bleaching that causes so much whiteness?

RK: It’s the permeability of the tooth structure. For anyone who’s ever tried to bleach the teeth of a young teenager, you already know that these teeth get very white easily. That’s because the oxygen can so easily get into the tooth structure. But as we get older that permeability decreases, so the older you get the more difficult it is to bleach. Well, the steps in bleaching causes enhanced permeability, more like the 14 to 18 years old. We’ve all seen cases where you have a patient come in and bleach, and it takes a good couple of weeks to really see a significant change, right? But then the patient returns to you 3 years later, and the teeth have regressed in color a little. Does the patient need to wear those trays again for 2 weeks? No. A couple of nights of tray wear, and the teeth are right back to where they were 3 years before when you bleached. Why is that? The answer is that the first time you bleached, the permeability of the tooth structure was conditioned to be like it was back when the patient was 14 to 18 years old. So, 3 years later, these teeth still absorb the oxygen much faster. By understanding this conditioning phenomenon, we have been able to capitalize on it and use it to its full potential to get teeth whiter than ever before. Because this conditioning phenomenon is successful on everybody, we now have overcome the lack of predictability of bleaching.

SP: One thing that patients constantly ask me is how long the whiteness lasts. What do you tell your patients?

MNV: I used to hate that question, because I never knew what to tell them. But now I love that question. I tell them that as long as they perform their very easy at-home maintenance which means wearing the trays during sleep periodically, the result is absolutely permanent. They get very excited about that. Deep Bleaching is more work than some other types of bleaching, so you have to charge more. When patients think that the result will be minimal, and they don’t think it will last, they hate to spend much money. But when we show them the before-and-after photos in Dr. Kurthy’s Deep Bleaching photo album and we tell them that this will be permanent, they really get excited, and then they are happy to pay for the Deep Bleaching.

SP: We use Dr. Kurthy’s photo album to present Deep Bleaching to patients, too. How do you use this when you discuss Deep Bleaching with your patients?

MNV: The Deep Bleaching photo album comes with Dr. Kurthy’s book on Deep Bleaching. I talk to dentists and assistants all
We take impressions and I don't ever remember a contemporary just about everybody so, it looks like you've when dentists found out dr. kurthy, what about comfortable deep bleaching trays. do patients mind having problems is when they've the time on the phone, and i think that most offices use the photo album just like we do. when we discuss tooth color with patients, if they seem interested at all, we show them all the before-and-after photos. it's funny to see. their eyes always get big. they look at us and ask if we can really get their teeth that white. we smile and show them our own teeth and tell them that it works on everybody, and that it's the most effective bleaching process ever developed. and we always tell them that it's permanent as long as they do the very easy maintenance at home. it's amazing to see how many patients get really excited and schedule deep bleaching.

**sp:** can you give us a quick rundown of the deep bleaching process?

**mnv:** we take impressions and make the deep bleaching trays before the first treatment visit. the first treatment visit is an in-office bleaching. this gives the patients a jump-start on the conditioning that i mentioned previously. then, depending on the type and severity of staining, they wear their at-home deep bleaching trays while they sleep which is very convenient for the patient for 2 to 3 weeks. then we have another in-office bleaching that really kicks up the whiteness. there are a number of important steps during the process, but this gives you a basic understanding of the overall process. the final success is all in the details. the only time we get calls from dental practices that are having problems is when they've not followed the directions in the book properly. it's very easy to do, as long as you follow the directions.

**sp:** do patients mind wearing the bleaching trays while they sleep?

**rk:** i don't ever remember a patient complaining about that. in fact, they all tell me how incredibly comfortable the deep bleaching trays are to sleep with. remember, the trays are very well-fitting and seal in the bleach, so there is no yucky bleach taste. here is what it looks like when the deep bleaching trays are in the mouth. just look at how comfortable these are (figure 16).

**sp:** dr. kurthy, what about the other two negatives that you discussed previously—the time it takes in the dental office, and especially the sensitivity issue?

**rk:** when dentists found out that deep bleaching is the real deal and really is an amazing process, they started asking me to overcome these other negatives—and, as you said, especially the sensitivity issue. any office that does in-office bleaching has probably seen a lot of problems regarding pain from bleaching. this is very distressing for patients and for the dental office staff. it's very easy to alter a bleaching gel so that it doesn't cause sensitivity, but when you do that, the gel also does not get teeth as white. nellie and i teamed up with al bevilacqua, a dental product developer from acquamed technologies. we've been working on developing these bleaching gels (acquaBrite) for about 3 years now and, to put it bluntly, we've worked our butts off to develop a line of bleaching gels that do not require retractors, do not require a paint-on dam, and, most importantly, do not cause acute sensitivity. and, in our clinical trials, we have proven that they get teeth just as white as the other brands that do cause acute sensitivity. it's something that al, nellie, and i are extremely proud of.

**sp:** so, it looks like you've overcome just about every negative of teeth whitening. how do you feel this will affect the field of bleaching?

**rk:** just about everybody wants white teeth. people have admired white teeth since the beginning of recorded history. but hearing that bleaching is very hit-and-miss, that it doesn't last long, and that it is often painful...well, no wonder why so many choose not to bleach. we can now be assured of a fantastic result. the in-office procedures simply use the bleaching trays, without any retractors or paint-on dam, so not only is the process shorter but there is also no fear of burned soft tissue, so the assistant does not have to constantly hover over the patient in the operatory. the patient simply sits and reads a magazine. considering all of this, and the fact that the results are permanent, people just don't have a problem paying for it. now that patients can be assured of amazing whitening results that are permanent, and they do not have to fear the discomfort of bleaching, we are already seeing the amazing response from dentists and patients alike. patients now see a good reason to make the financial investment in white teeth. and, you just cannot believe the loyalty (and referrals) from a patient such as the ones we showed here.