

Smile Design: 7 Deadly Sins

Video Transcript

All right, gang, listen, we're going to talk all about design today. We're going to talk about Seven Deadly Sins. I know all of you have different roles in the practice that you're in. So, I'm sure we've got hygienists and assistants and dentists and maybe some office admin people here. And what I want to share with you as we go through this lesson today is I've always been a firm believer that all of us on the team having a really great grasp of what we do clinically matters, even though we all may have a different role, even if it's scheduling, and it's a non-clinical role. It's really, really important.

So, what we're going to talk about today are concepts, concepts you can bring to your patient. This is like a cheat sheet or a recipe, a way to look at every single person who comes into your practice and to assess this. There's lots of ways to fix this. If we're going to go through different things, it's not always going to be about pretty, it's going to be about function. Sometimes it's going to be multiple disciplines coming together. So, it's not always putting on a crown or a veneer. It could be about orthodontics. It could be about whitening. It could be combinations of lots of different things.

But what I want you to do is just to start thinking of every single patient you see and how this applies. And the other thing I want to do is I'm guessing you guys were listening to the same cool music I was listening to. And man, what perfect song for where we are. I wouldn't say we made it. But we've made it through. I want to talk about how we make it. Let's talk about how we make it.

So, let's start right at the beginning here. Watch this with me, guys, because this is life today. This is how our patients think. It's how you and I think. We buy on Amazon all the time. So, this is a mindset that I really want you to get accustomed to and to understand what's going on in the world because we have two choices. We can watch that this happens in the world today or we can pretend that it doesn't happen at all, bury your head in the sand. But that doesn't do us any good.

If this is how you and I think if we buy on Amazon once a month or once a week, and nobody has to raise their virtual hand like once a day, then don't you think this is how our patients come into our practice today? Because this took 44 seconds to get from start to cart. So, our patients are coming to us today with a mindset. They want what they want, they want when they want it, and they'd like it delivered the way they'd like it delivered. Because Amazon has done an incredible job showing them that that's how we can all live today. So, I want you just to keep that in mind as a frame of reference as we go through the Seven Deadly Sins today.

I also like to pay attention to these. So, we have one more to consider as we all phase back into practice depending on where you live and where you're practicing. But these are four things that your patients are thinking about. This is what makes them come to your dental practice or not. So, they want you to be convenient. They really would like you to accept their insurance. Now, that doesn't mean

you have to participate in it. That's a choice. But they really would like you to accept it and not say no.

They want to see great reviews. So, these are things we need to work on because our goal, especially now when patients are going to come back in phases, not everybody's coming back when you open your doors. So, we want to do all the right things to get as many people coming back to our practices as possible in order for us to get back on track and not just make it through but make it. And patients also want advanced technology. Now I'm not here to talk about anybody's technology in particular. I'm just here to share that there are some technologies that you and I can have in our practices that not only facilitate great dentistry, but it's one of the four things your patients want from you. So just bear that in mind.

Today, as we sit here today, we've got one more driver, and it's the number one thing on your patient's mind. We're not going to get into it, we're going to blow past it and how we're going to fix this problem. But they want to know if they're safe. Am I safe coming to see you? So, you guys have had far too many lectures on PPE and all that other fun stuff. We're going to get into some real dentistry today. So, imagine yourself in your practice and no matter what your role is and how you can participate in this process, how you can prepare a patient, how you can see all the things that you need to see so you and I can work together to help that patient get what they want, what they need, how they'd like it, and when they'd like it?

So, that's my team. Love this gang. We've been together for a long time. We've grown. When I first bought the practice, there were only five of us. There are 15 of us now. Not everybody's in that picture. But if you can tell, we like each other, we like being around each other. And that's a whole other lecture to speak about. But it's nice when we can work together as a team and actually enjoy each other's company and feel like we're a part of something bigger.

These are the seven biggies. We're going to really cruise because I have a lot of information I really wanted to share with you all and I'll give you a way to contact me after this. If you'd like

this information, I'm happy to share this with you guys. This is super helpful. You can have it. So, Seven Deadly Sins; assumptions, tooth position, tissue, how we arrange teeth, the teeth themselves, how the bite works together, and then what materials what would I use to make all this happen? These are the seven places that many dental practices hiccup or they may have a misstep.

And when we miss one of these seven, that's what gets us in trouble whether it's a case not going well, a patient is not happy, or just we have a bunch of patients who need some nice dentistry, and yet they never tell us yes. So, we're going to talk about each one of these individually today. A couple caveats rules for us to really live by and think about. Banking tooth structure is key. No matter how good we are, no matter how great of a job you do, I do. Ultimately, we've got patient factors. We can't control what they do when we go home. Now we've got a lot of awesome tools Crest helps us with so that really helps. Thank you. But a patient still has to use those tools.

And then there's a whole other host of things that are sometimes out of everybody's hands, including just the hand cards we're all dealt genetically. You guys all know you've got some patients, everything goes well, even though they do everything wrong, and you have patients who do everything right and somehow things still go wrong. So, we want to bank as much tooth as possible, meaning we want to be super conservative whenever we have the ability to be really conservative. This is important too. So, the clinical team really dug into this one and understand that there's only one correct diagnosis. We all look at a patient and we see the same problem, or we should see the same problems.

But there's sometimes lots of ways to treat those problems. And there's lots of right ways to treat those problems. So, I don't want you to get locked in a box and feel like if I do it this way and I don't do it this way that you're wrong or you're bad, you're not. But this next one's key. Because there's a difference. There's a difference, guys, between who's going to do the treatment. When you do the best job you can with case presentation and education and you

show your patient all the right things. And they say no, or they say, "Hey, can we do this but can we do this over time?" That's okay.

The problem is when you and I get tired of hearing no from people, when we get beat up when we've been doing this for five years, 10 years, 25 years, and we stop recommending the very best treatment to our patients because we're afraid they're going to tell us no. We're afraid they don't have the money. We're afraid the insurance isn't going to like it. Our job is to offer them the best treatment plan and the best we know how like they're your mom, your dad, your sister, your brother, your child. And then if the patient puts a limit on us then we do the best we can.

So, I put this picture in here for a couple reasons. One, it just makes me smile. So that's my wife on the right, Anastasia. Some of you know her. She's been in dentistry for about the same amount of time as I've been in dentistry and she does a lot of speaking and all sorts of fun things. So put it in just because it makes me smile to see her. The second reason I put it in as our friend, Karen. And she's the young lady on the left. And you all know Karen. You just know her by a different name. She's the person that you pull up on this whenever you want to get someplace.

So, Karen is Siri. Karen's also the Australian voice for every GPS system in the world. She's a great friend of ours, lives in New York City and her role in the slide is to understand that that's what we're going to do today. The Seven Deadly Sins, it's just a GPS system. It's to show you how to get from here to here as you look at patients, as you assess patients, as you diagnose and treatment plan patients. It's a system to get from one spot to the other. But you guys know every GPS system only works when we input some things, where we are, and where we want to go. And then everything in the middle is the Seven Deadly Sins we're going to talk about here today.

So, let's start with this one, assumptions. Those of you who've seen me speak before on the last webinar I did with Crest, I had this image out there. I use this image in almost every presentation because it is the foundation of

everything that we do. So, everything else we're going to talk about today is pure clinical dentistry. This is up here. This is how all of your patients see the world.

So, there are hundreds of us on this webinar today and we share a lot of things in common. But if you were to divide this virtual room up into halves, I can promise you it's like clockwork, half of you looked at this image and the first thing you saw very, very quickly was a young woman. And the other half of you looked at this image and you immediately saw an older woman. So, the point to this is when we're building somebody's smile when we're helping them look better and we get to better function is that you and I have a bias. Our bias is we either see the young one, or we inherently see the old woman.

We've got a lot of science behind what we do, but we have this dental bias, people's teeth should look this way. It needs to function exactly this way. And there's some truth on the function side, but on the look side, not as much. So I'm going to tell you why I put this in here. If you do everything else right clinically, and you miss this step, you're going to have unhappy patients. And my biggest failure in 25 years is this slide. So, I'm guessing in practice whether you did the veneers, you've taken care of the veneers, you've assisted with the veneers or you work upfront and you said: "Oh my gosh, those things look great." And you're proud to be at the practice you're in.

You've had a patient you've done some dentistry on or you've witnessed it where you thought everything was great. And the patient came back, and they weren't happy. So, I picture that I do this [inaudible] case, I thought it was 10 veneers. It looks spectacular. I will tell you still to this day in 25 years is my favorite result ever bar none. And I did all the clinical steps we're going to talk about, but I missed this. And by missing this, what happened is a week later when my patient came back in and we were doing our usual, we're doing a bite check, a tissue check and making sure our patient was super, super happy and fully expecting that our patient was going to love her smile.

She came in and said, "You know I like it. It's okay." And my heart sank. My heart sank because that's not what we want to hear when we treat

our patients for anything. We want our patients to love it. And as I dug deep, what I learned is although we built for this beautiful smile, she wanted chiclets. Now if I deliver functional chiclets, that's okay. But that's what she wanted: functional chiclets. I gave her a beautiful smile. She didn't want a beautiful smile. And I learned this very lesson on assumptions the hard way as I cut off 10 brand new veneers and started again to give her the 10 teeth that she wanted.

Now, tissue had to be perfect. Occlusion had to be perfect. We had to follow all the rules. But you guys know what I'm talking about. Don't miss this one. It's the number one sin. So, let's go to the clinical stuff. This is really fun. All right. And I want you to think of all of these things as you look at a patient and literally like I said, I'll get this to you. Because we create a checklist, we have a checklist in every treatment room in our practice, it's laminated, it's easy to follow. So, we can go in with a marker, boom, boom, boom, boom when we're done, erased.

In today's world, it's as if you're going to do this, I'd probably just print off something and trash it. And then once we're past COVID, you can go back to the old dry erase, but make this simple for every single person on your team to follow. Everybody should understand this and look at our patients the same way. So the first thing I'm looking at is tooth position. And all I want to know is does my patient do her incisal edges or his incisal edges follow their smile line? Do they follow the lower lip? That's a great smile. One of the reasons it's a great smile is because her incisal edges just line up.

Those are her natural teeth. This is like a little bit of ortho, a little bit of whitening, this is a piece of cake to do and you have tons of patients who could look that great with minimal dentistry and certainly nonhandpiece dentistry. So, the first question I ask is, does the smiling follow lower lip like this? Should it? Should it follow the lower lip? Here's a great example of a great result too, those teeth that are on top, they're a perfect shade match, they're really nice harmony, but the rest of our patient's dentition posteriorly, as well as on her lower arch.

But imagine if we simply follow the rule like where there's a principle that incisal edges

should follow the lower lip? We'd be in trouble. That smile would be all over the board. And I know that seems obvious to you. But the point I really, really want to hit home with this one is when do you think this patient notices that when she smiles her lower lip is higher on one side than the other, what day? Because I'm here to tell you, it's insert day. It's the day you insert these restorations or it's minimally afterwards. It's the week after somebody smiles and says, "But my lip."

And you've delivered two, four, six, eight or done ortho, whatever it is you've done, and they look in the mirror and like, "But what is this?" So, the key to this is to see it on the front end before you treat your patient. So, the first thing we look at as a team is to say does it follow the lower lip and if it doesn't and we're going to be doing some dentistry, then we have to decide should it and if I have a patient who's lower lip is perfectly symmetrical, no brainer. I have a patient who looks like this person then I have to hand them the mirror or have to have them look up at a monitor and have them say, hey, when you smile, do you notice anything different from the left side to the right side?

And I'll pause a couple seconds. And if they don't jump in and say, "Oh, my lower lip." I'll just say, "On your lower lip." And they'll go, "Oh my gosh, I never noticed that before." And now all of a sudden, a piece of cake, guys. But we have to inform before we perform because on insert day or a week after insert, that's when we get into trouble.

So, the next thing I want to know is, is there uniform gradation from the canine back? This is really important because patients want to know how many teeth do I need to work on to make this look good? And if you've not done a lot of restorative dentistry, then you want to know how many teeth do we need to work on? And I'll tell you this from the other side of it because I have met team members at other practices who either say, my dentist hasn't treated enough teeth, they don't look good. Or my dentist treated too many teeth, I think they're just all about money.

So, the first thing we're going to start is what does our patient want? Let's not assume what

they want. So, if this patient wants a 10 out of 10, if she'd like to be on the cover of any cool magazine and have the most perfect smile, then understanding how those teeth play from front teeth to back teeth is really, really important. And if it's a 10 out of 10 then we have to make a transition, we may have to work on more teeth or we may have to orthodontically move teeth and then work on some teeth.

But if you have a patient and they say what, "You know what, all I really want is great function. I don't have to be a 10 out of 10. I'm good with being eight and a half out of 10." Then sometimes we can minimize the treatment that we bring to them and everything gets really easy. But we want to know on the front end because of the assumption that we have to be paying attention to these things.

All right, here's where some of these things come in. So, we're going to hit the tooth position now as another sin. Let's talk about where teeth should actually be positioned. And I'm going to go in reverse. So, we learn a lot of these lessons from dentures really. And the reason we learn a lot of these lessons from dentures, guys, is really simple. Because years ago, people lost their teeth at a very young age, which means they had some good-looking teeth. They just didn't really have any great bone or any great tissue.

So, a hundred years ago, when people started making dentures, we modeled a great smile on the denture from a great smile on a person. So here we are today when in doubt think about dentures. Think about them just as guidelines, not as rules. We don't want to make everybody so perfect. But these are great guidelines for us as we start determining where the edge of those front teeth should be. And remember, the first thing I looked at is that the edges, the incisal edges follow the lower smile line. That's why we're starting here with an incisal edge position because it's the most important thing and it sets the table for everything that we do from here on out.

So really cool in dentures, there are some rules to follow. So, when in doubt, again, we have our little cheat sheet. We have this little thing in our practice and on it, it says okay, we

can measure from the depth of the patient's vestibule down to where the incisal edge should be. And for most patients, it's going to be about 22 millimeters. Now you can say it's going to be 23 millimeters on somebody or 21 and a half millimeters on somebody else. But if you just said 22 millimeters as a general guideline, you're already really, really close to understanding where that edge should be.

And again, that's a measurement from the depth of the vestibule to the edge. It's very predictable. So, it doesn't matter if somebody has receded gum tissue, perfect come tissue, they have altered passive eruption where the tissue is covering half the tooth. It's not about gum tissue, its depth of vestibule to incisal edge 22 millimeters give or take. There's another cool rule that we see with dentures. It's the 11-millimeter rule. So, this is another anatomical thing. So, you all are familiar clinically with where the incisive papilla is.

So, all you have to do is take another ruler from the incisive papilla and measure forward to the most facial part of a front tooth. And when you do that, it's going to be about 11 millimeters. Again, it could be 10 and a half. It could be 11 and a half. But if you went with 22 vertically and 11 horizontally front to back, you're already going to almost know where those front teeth should ideally be. We're starting to see how this smile should set up just with two rules that we've learned from dentures really cool.

And then if you've ever done dentures before some of you here have and some of you may not have. There's another rule that says at rest if I just let my lip fall, how much of my incisal edge should show? And dentures have taught us over the years that that should be somewhere between two and four millimeters. And again, it's a guideline because I'm going to show you lots of reasons where that goes wrong. Because I don't want you to get pigeonholed into looking at every patient and saying, oh, that's the 30-year-old, they should show four millimeters. Oh, that's a 70-year-old, maybe they should show one millimeter.

So, there's some range and some things that come into play. So, let's talk about that in some detail here. This is important stuff. So,

think about this patient. Rest display. Two to four millimeters? Yeah. How do her lips look? Pretty even right now at rest. So that's the rest position that I'm looking for and how we make this judgment. And now again, just like we did with should the incisal edges follow the lower lip, the smile line, I want you guys to ask yourself these questions. Okay, where is it? Two to four millimeters on this patient, we're probably four millimeters a little bit more on her left side than right based on the length of her incisor.

So, does age impact it? We used to say yes all the time, but should it? Should it? Does the length of the upper lip impact it? It sure does. Does the mobility of somebody's upper lip impact it? It sure does. And can skeletal position of the upper jaw itself be in the right or wrong position? Absolutely. I'm going to show you all of those. So, it's really simple to digest. For those of you who don't recognize this woman, that's Maye Musk. So that's Elan Musk, founder of Tesla's, mom. Now back in the day, the picture you see towards the top of the screen is Maye Musk. I think she's like 19 or 20 in that photo, I don't remember her exact age.

And she was one of the first supermodels out there. So, she was a cover girl at age 19 let's call it. That's Maye Musk today in her 70s. So, let's go back to our first sin and assumption. Do any of you believe that Maye Musk wants to look any less vibrant, beautiful, happy, energetic at her present age than she did when she was 19 years old? No way. She wants to look amazing. She's confident. She's beautiful. Look at her, and she exudes it. So, when it comes to age, does age necessarily impact how much truth we should show at rest? Not really.

We have to ask our patient, does our patient want to be a 10 out of 10 at age 70 or 80? Do they want to look 70 or 80? Or do they want to look 30 or 40? Those are the things we need to know. Let's talk about the upper lip. This is really important. So, we talk about incisal edge position based on the length of an upper lip. This is something that most of us in dentistry never studied. So, don't beat yourself up. You're not supposed to know this because I'm betting that 99% of you, we just never taught it.

So, a new day today. The average length of an upper lip, we can measure that. We know statistically where that should be. So, for most people, it should be 12 to 15 millimeters in length, which means a few things. Look at our patient here. If you were to take this patient and said, how long is that a blip if we measured it well beyond that range. Well beyond. So, if this patient was at rest and showing teeth display, you wouldn't see any incisal edge at all. It'd be like me. I don't have a lot of incisal edge showing at rest at all because I have a very long upper lip.

So, your patients have a choice. And again, if you're going to treat their smile, when do they notice? They notice after you're finished. So, we want to talk to our patients and say, "Hey, Mr. Mrs. Smith, we're going to work on these front teeth. I want to show you something. The average length of an upper lip is 12 to 15 millimeters. Let's take a look at how long yours is. What that means Mr. And Mrs. Smith is we could give you the 10, 12, a full mouth rehabilitation with the most perfect teeth in the world. And if we put them in the spot that they should be in then you're not going to see them when you're at rest. Now when you smile, they're going to look great, but when you're just at rest, no one's going to know they're there. Is that okay with you?"

Because if it's okay with Mr. Smith, awesome. And if it isn't okay, and all of you want to figure out how to get referrals from the plastic surgeon in your neighborhood, who everybody says is the most impossible person to get referrals from? This is your ticket. We refer patients to our plastic surgeon for patients just like this, who say, "You know what, darn it, if I'm going to spend all this money on my smile, I want it to be perfect. So, I want the frame of everything to be perfect." This is a simple procedure to get from there to there. Plastic surgeon goes in, they make their markings, they take away that sliver of tissue that you see, they sew it up. Nobody knows about her [inaudible] line is right underneath your patient's nose that they're never ever going to see it.

So, let's look at this one. We've all seen this patient before. And my guess is a generalization

because again, we're not typically taught this. We look at this and we think gummy smile. And gummy smile means oh my gosh, we can't do anything with this patient. We can make his or her teeth whiter, we can perfectly align them. If they needed some restorative care, we could do it. But there's really nothing we can do to improve that without surgery, bony surgery.

But let's take a closer look at this patient because I always ask the question, is the bone in the wrong place, or is my patient just moving their lip like this far? Because most people move their upper lip this far. This patient just moves her lip a lot. So that's the same patient. We didn't move any jaws. The only thing this patient had was Botox, and that Botox controlled how high she could smile. So now her full smile looks like this. From that, that's the only difference. And do you know what dentistry she needed? Nada. She had a great occlusion. She was okay with a little bit of natural look to her teeth.

All she really needed was her lip adjusted to give her the smile that she wanted. Because remember, it's not about what I want as the dentist. It's about what she wants. So, this was really simple. We have a plastic surgeon that's not too far from us and again, could you and I do this in our practices with Botox? The answer is state by state check your guidelines, but in many, many states yes, you guys can do this if you want to. At our practice, we don't do it. Because what's more important to me is sending enough patients to my favorite plastic surgeon so they send patients back and I get to do all the fun stuff that I really, really like to do.

But the short story, it wasn't a gummy smile like you and I were taught. Now this patient was a gummy smile. So, the only way to correct this smile and get a 10 out of 10, you can do your orthodontics. We can line things up, we can widen if you wanted to do some veneers. That's part of the process, you can do that. But the only way really to give a 10 out of 10 here is to take this patient's upper jaw and move it up, and to take their lower jaw and make sure that it fits in her upper jaw.

So, as it comes to tooth position and we're talking about incisal edge position, we talked

about a lot of stuff already and things to consider. And again, that's why it's so important for you guys to have a checklist because if you have the checklist, you won't forget to look. If you don't have a checklist, you're going to forget the things that you don't look at all day, every day. And that's totally normal. Because there's no way we can remember all this stuff from memory, and you don't have to remember it all from memory. Make life easy for yourself.

All right. So, let's look at a few other things. We've been talking a lot about things like vertically. We talked about the 20-millimeter rule. We talked a little bit about horizontal with the 11-millimeter rule. We talked about lip mobility. We talked about length of lip, we talked about skeletal issues where it's not about the lip, it's just a bony issue. Now let's talk about some other things we can use to assess if these incisal edges are in the right spot. So, we use this again and remove them all the time. So, for those of you who assist with making a denture or a partial, that's missing front teeth or you're the dentist, you guys know this well.

Hygiene team that you probably don't see this, but you see it later. And probably what you see most recognize most by the mistakes oh, we don't do a great job. When a patient comes in from another practice and the teeth are due for a four, they are too long. They were too short, the patient had [inaudible] because maybe they were even over closed. So, these are things that we use, and no matter who you are on the team. These are things to look at when somebody's sitting in your chair and you're having a conversation with them. Just pay attention to these things when they speak and they count from 50 to 55, or they say F and V words, you want to see where the incisal edge of their upper teeth touches the lower lip.

So, everybody in the clinical team, you all know there's a wet-dry line. And if you look at this patient, and you look from the side and you have them just count from 50 to 60, you can watch the incisal edges hit the wet-dry line, are they forward of the wet-dry line? Are they behind the wet-dry line? Do they dig into the lip like that? Or are they so far away from the

lip, they're not even closed? All of these things help us understand exactly where that incisal edge should be. And then what I also want to point out to you guys here when I say reflective versus deflective, I want you to look at the central incisor that's pretty clear in that picture. And I want you to see the curvature of that tooth.

Because again, one place that we get forgetful in dentistry is we forget that teeth have three planes, natural teeth that come out of the gum tissue. And then they come straight up and down, but they're a little bit angled towards the front and they tend to dip back a little bit. And when we add all three planes, we tend to nail our incisal edge position and make sure that it hits that wet-dry line. When we forget the three planes, and we either do two, which is good, but not great or worse, we do one then we tend to get teeth that flare, and our profile is too far out.

And sometimes you guys will see an orthodontist do this. When they're trying to figure out a way to manage the size of the tooth and the space that's there, you get a patient back and their teeth are really flared. But again, that's a conversation you have with your patient. Assumptions don't make them. All right, so as we're establishing an incisal edge position, we also have to think about function. We have to think about it as we're building this smile and we're making teeth look pretty.

And I'm here to tell you guys, my first job, when I look at smiles, is to figure out no matter what type of dentistry we're going to do, is how do I make them look pretty? Because if I make teeth perfectly functional, but they're ugly, is my patient going to be happy with me? Probably not so much. So, what we want to figure out first is use all those rules just for incisal edge position, mind you. And then we want to figure out if we follow all those rules. How do we make this bite thing come together and work?

So, we're going to talk a little later about a concept called anterior guidance. Some of you I'm sure are very, very familiar with this. But the super, super short story is if your patient is biting straight up and down, they should

hit on every single tooth at the same time in a perfect world depending on class one, class two, class three. But that's ideal. If your patient goes into any kind of guidance where they're taking their lower jaw and moving it forward, then they should have lines that guide off their front teeth. And the reason you don't want to see any lines on the back teeth is we want to protect the back teeth because our back teeth are really good at this. And our back teeth really hate this.

So that's a big one, especially the hygiene team when you're looking at a patient and you see wear on their teeth or you see abfraction lesions or you see chipping, breaking, cracking, mobility, teeth that are in hyper occlusion. When you see anything that's just not perfectly normal just have your patient bite down. Check it. Then from there have them bite together, slide their mandible forward, and just take a peek. Do their back teeth touch? They shouldn't.

If you have them slide an angle at any angle, do their back teeth touch? They shouldn't. If they do, now we can start having a conversation. We can start educating our patients all about how we fix bites, fix occlusion, there's multiple ways to do that that we won't have too much time for it today. But those are easy things to look for easy conversations to bring up to help your patient understand why we need to get their bite correct.

All right. Here's another one. This is another principle that we borrow from dentures when we're trying to make natural teeth look good. It's called a neutral zone. And all you have to remember is we've got all these muscles surrounding our mouth and those muscles push upwards because they're really, really strong. And then our cheeks pushed this way because we've got masseter muscle as well as other muscles that push internally. And then on the inside of the teeth, we've got this big muscle called a tongue. And your tongue pushes out this way and your tongue pushes to the front.

So, the short story is when you and I put the teeth in a space called the neutral zone, then

the cheeks are happy, the orbicularis muscles are happy, and the tongue is happy. And none of those muscles start moving teeth around. And when this goes wrong because you guys have all seen this too, this goes wrong is when you either treat a patient or you have a friend or family member or maybe you and somebody made everything look perfect. And then three years later, things start jumbling up again.

It's because the muscles are always, always going to win the battle over the teeth. Always. It's why we have retainers when we do orthodontics to hold teeth in place. When we put teeth in the right spot with a neutral zone, they're not too far forward, not too far backward. They're not too flared out towards their cheeks. Then we tend to make the musculature, I say that sometimes fast, we tend to make the musculature really happy. And when the muscles are happy, then we get to do any kind of dentistry that we want.

So that's an awful lot just talking about incisal edge position. So, you get the impression that that's important because that's our first step and there are a lot of factors to it. And as we go through, we're going to move more and more quickly because I like to one start with the most important thing that dictates the smile. And two, we start with the hardest thing. But it gets easier as we move along. All right, I'm going to just do a little show and tell here.

So, let's look at this patient top left. That's the person that we look at and comes into your practice every single day. And in our practice, we're like, gosh, there's lots of stuff going wrong there. Let's try to figure out where these incisal edges should go. There's lots of ways to get where we are here. I'm going to show you how we did it. And I'm going to talk to you about why we did it. But I always want you to remember that we've got to begin with the end in mind. Because if we're going to restore teeth or if we'd like to prepare teeth then remember what we talked about way back in the beginning, our job is to bank tooth.

We want to remove the least amount of tooth structure possible in order to deliver the result we want. And this particular case, this is just a temporary material we literally filled up a

matrix, seated it on. And normally people do this after they prepare teeth, but we do it before we prepare teeth because I want to see where I'm going. And when Holly and I can sit with our patient and see where we're going, then we know exactly how much or how little to structure we need to take away. All right, cool. This was kind of fun.

So, lots of ways to capture this. I showed you one way of poly matrix, you can take physical impressions, you can scan teeth, we talked about technology. Again, it's not about a [inaudible] scanner that is. It's simply about the fact that having a scanner today versus a physical impression. That's something your patients want. It also makes your life a whole lot easier. But if we're going to begin with the end in mind, then we need to see the smile before we ever touch teeth or whatever that smile may be.

So, let's talk about how we mockup. Let's talk about what I just showed you a second ago. You can do that two ways. So, you can work with a laboratory or somebody on your team who's really skilled and on a model, you can make the teeth look the way you'd like the teeth to look. And then with a silicone material, there's a million companies who make one, you can make a mold of that. And then that mold becomes the vehicle for whatever temporary material you want to put inside, seated in your patient's mouth before you've prepared the teeth.

And now you're looking at the end result or you're at least looking at where you're going directionally. That's what I did with this case. So, this top left here is the patient who came in who was really unhappy with the work somebody did. This is just a quick temporary material that we used before we started working to get an idea of where we may want those teeth to go. Simple, simple technique. Here's my other favorite way to do this. Sometimes we have patients and we're not working on tons of teeth, or we're not making massive change.

And when we do that, you and I can do that work right in our practice. I don't need to have a lab that's going to use wax, or I don't need to

use a scanner and then digitally build the smile that I want and then 3D prints a model. I do all those things on bigger cases, but on smaller cases that don't need a lot of change. This is just a triple tray. So, if you're on the restorative side of your practice, you probably have seen one of these before and used it for a definitive impression and a final impression.

Hygienists, administrators if you're watching this, normally we use materials like this when we're finished preparing the teeth, but we like to use it before we prepare teeth. And then there are a few companies out there, they make a clear [inaudible] sign, that's really important. And then we just take our work material, just like you see this amber color here. Again, you guys pick your favorite company, it doesn't make a bit of difference to me. And it's just a more fluid version that I put just around the gum tissue so we can catch really super accurate details.

And then here's how we do that. So, we've got this gentleman, he comes in on the upper left, that's how he presents and we're just trying to figure out where his incisal edges should be right now. So, you can do that with composite. We did this with flowable composite. Pick your favorite brand, it doesn't matter. But we went in and we layered on and we said hey, if we were to lengthen these centrals this much, and then maybe we've got to lengthen these laterals, this much. If we do that. Does it change the smile? Yes. Does it make it look better? Yes.

Then we've got to look at occlusion because we've got lower teeth. What do we need to do to those lower teeth if we want the upper teeth to look like this? And we check all our boxes. And then once we know that we've fulfilled all of our boxes after we have this image you see in the lower right; we make a little matrix like this. It takes three and a half minutes to do. Three and a half minutes, it's awesome. And now all of a sudden, I'm not working with a lab. Not that I don't love my lab. I do but I'm not waiting or I'm not scanning and 3D printing and waiting. I'm right there game day, and I'm right into dentistry, which is awesome.

So, these are the other ways to do it that I mentioned. So, 3D printers are great. You can

physically impression. You can scan. It doesn't make a bit of difference to me what technique you use, just make sure you're really, really great at your technique, you're very comfortable with your technique. And if you're not or you want to make a shift, just get yourself in the right hands of people who understand any new technology you want to bring in.

Here's why we do all that stuff. So, this was another patient we worked on. And we did the same thing I showed you before. We just filled up a matrix of silicone and placed it in this patient's mouth. And it was all cured. And at that point now again, I want to bank as much tooth as I can. So, I know how much thickness I need for any material I'm going to use. I put it on. I use a little depth cutters, we crank through, and literally what I find out on nine out of 10 patients I work on is I'm barely through enamel to get the result I want. Instead of prepping these teeth like crazy like we've always done in dentistry. That's fun.

All right, let's talk about midline. So incisal edge position. A big clinical hitter. Two midline. You guys have all seen Tom Cruise that we don't need to review the story about how awful his teeth looked. But the short story of why we didn't like Tom Cruise's smile is it wasn't that it was off this way or this way. It was canted. It was tilted, it was angled. So, there's some reasons this happens in dentistry. You guys are going to see when you see a midline that's off, it's either to one side or the other or it's angled.

The first thing I would look for is if a patient had orthodontics years ago, and they took out premolars. Because when we do that, we often have a little too much space and teeth start moving around a little bit too much. But here's your take on what you need to know. There's a really, really smart guy called Vince Kokich Jr. He did all these studies and what he found at the end of it are the two numbers you need to know. You can be up to four millimeters away from the center this way or this way before anyone notices including all of us clinicians.

So, if I didn't tell you the story and I showed you a patient and their midline was perfectly vertical, but it was moved a millimeter or two millimeters or three. So, the eye in

conversation, we would never ever notice it. But if a midline has an angle or a cant to it, we can't get [inaudible] with it at all. So, what's most important about midline is not that it's perfectly lined up with a face. That's a 10 out of 10. But we can also deliver a nine and a half out of 10 if we're a little bit this way or this way, as long as that midline is perfectly straight up and down.

All right. So, we talked about teeth. We're not done with them yet, but I want to talk to you about tissues because tissues dictate lots of things. They dictate midline. Sometimes I'll show you how they dictate lengths, widths, and ratios. So, here's what I want you to know, in America, because this changes again when you talk about assumptions culturally and even in the US really if you're in California and you have teeth, they're longer. That's more attractive on the West Coast than in the old school northeast where I'm from, from Buffalo.

In Buffalo, we don't see like 12-millimeter incisors. But the average central incisor is 10 to 12 millimeters long. So, what I want to ask you is, if you look at a tooth and you measure it, and let's say it's right in the middle, it's 11 millimeters. And the incisal edge is perfectly positioned then you start measuring back and you're like, "What do I do?" Then you have to understand how the tissue plays a role. What do you do when those two things don't add up? That's what's important. So, a silly, silly movie is a really good example of what we're going to talk about.

I want you guys to start thinking about teeth as the picture. That's the picture that we're delivering to our patient. And once you start thinking about gum tissue is the frame. And just take notice as silly as this is at how different that picture looks when we put it in different frames. So, when it comes to making smiles look great whether we're restoring teeth or moving teeth orthodontically, we have to consider tissue when we're trying to deliver a 10 out of 10, a nine out of 10, an eight and a half out of 10. It's really important.

So, I do the same thing with tissue that we do with hard tissues. I just start asking questions. I go to my checklist. Is there symmetry from

left to right? Is there too much tooth showing? Do we have to add more tissue? Is there too little tooth showing? What do we do about it? And this patient you look at, those teeth like the number eight and nine, they're a little short so they need a little length. But that's not the only reason they don't measure up to that 11 millimeters of length that we would really want to see.

So, what happens if you just moved it a little bit like a half a millimeter, it totally changes the way the teeth look in length. It also changes the angle of a tooth. So, if I wanted to move the angle of a tooth, sometimes it's the tooth itself and sometimes I can give the appearance or the illusion that the tooth is straight up and down simply by moving the tissue. So, the apex of it was a little bit more towards the mesial or a little bit more towards the distal. There's lots of ways to move tissue, guys.

So, in my humble opinion, lasers are awesome. You want to use a scalpel and go old school. That is also awesome. The only old school that I do not ever recommend today is an electrosurgery unit. And the reason I don't recommend an electrosurgery unit is it generates far too much heat and heat necroses tissue, which means it's unpredictable. So, it's not that your patient won't heal. It's just that you may put your tissue here and if it's burned, it may shrink here. You just don't know.

And on the next patient, I may put it here and it may stay there. So, I have no perfect way to know exactly where I'm putting the tissue. So, I don't like an electrosurgery to move it. Lasers are good, scalpels are good. Pay attention, guys, if you need to move bone. Remember, hygienists this is your warehouse, hold that restorative side of the practice accountable. We don't want to violate biologic width because if we do that, we take healthy tissue and turn it into unhealthy tissue.

All right, let's talk about tooth arrangements. This is really fun. These are things that you guys are going to see if you were to Google a great smile or look at the cover of any magazine, male, female, it doesn't matter. They're common principles that you're going to see. When you pull out your phone, you're

like, "Wow, that smile looks good" or "There's something about that smile I just don't like." So, two of my favorite patients got restored, this gentleman and this young lady, it's got to be 17 years ago.

Now, this was part of a campaign that one of our industry partners who make ceramics did, and these were two attractive people and they're trying to get this couple together to talk about the material that they did. So, they need a little dentistry and we were lucky enough to work on both of them. So, it was really neat. So, let's talk about tooth arrangement. We've got an incisal edge, we've got midline, we've got tissue. Let's talk about arrangement.

The first question we ask is, are the centrals dominant? Are eight nine notice leave bigger than seven and 10? Should they be? Is there a difference between men and women? Sometimes. West Coast to East Coast sometimes. So, as I look at all of these, I want you guys to remember and always refer to our very first deadly sin, assumptions. There are lessons we know clinically. There's data and metrics for us to have guidelines for how to do this. But at the end of the day, we need to make sure that we're engaging our patient and we're educating our patient. And then thirdly, we're empowering our patient to make the best choice and be a part of this process with us.

Because should they be bigger? By the textbook definition, yes. Should they be proportionally bigger in a man than a woman? By a textbook definition, yes. But all this stuff is super, super subjective. So, guidelines, not rules. The other thing we look at besides that is, how do these teeth fill out the buccal corridor? So, this is a patient we worked on maybe 12 years ago. And this person wanted a gentler look. So, when I talk about buccal corridor, if you're on the restorative side, what you know is that it means when that patient smiles, the teeth fill everything up. There's no dark space anywhere. There's no dark space at all. The teeth fill it up.

So, it fills out their cheeks on the inside. In general, we want to fill that space. We don't want somebody to smile and see like the front six teeth and then have their back teeth disappear. You guys have all seen that. It's an

awful, awful smile. But the degree to which we fill out that buccal corridor. Again, it's going to be part of what you test drive with your patients. So, this patient, we filled it out, but it's not really noticeable. You don't see dark space. But you also don't see a lot of tooth structure as you get past this first premolar by design. But this is a question you need to ask yourself.

All right, this is the fun part. You guys know some of this stuff. You've all heard about the golden proportions. So, you start knowing that the width to length ratio of the central. So, if you look at the central on the left-hand side of your screen, I've got that crosshair in it. You know that the percentages fall between 68 and 85% of the length should be the width and the reason that percentage exists, assumptions. You have to decide for each individual patient where they should fall. So yes, in general, females tend to prefer a more slender central incisor than like a six-foot-seven football player who tends to have a wider central. But don't assume, let's ask. Let's test drive.

And then we start looking at ratios of sizes of teeth proportionally of the central incisor to the lateral incisor and the canine. So, if you guys haven't been looking at it this way before, I hope to shift how you look at teeth with this image. The most important tooth that you see on the right-hand side of this patient's smile is their lateral incisor. That's home base. Because if that lateral incisor is one and as we look at those teeth then the average central incisor is going to be a little better than one and a half times as wide and the canine is going to be a little more than half of it.

Now it's not that canines are big teeth. So, what I want you to pay attention to is in addition to the teeth themselves is the position of that canine. Point six-two isn't the whole canine. Point six-two is the leading edge. So, we're looking at the mesial surface of this tooth and the mesial half. We're not seeing the distal half of this come out at all. So, when it comes to length to width, we have to know the proportions and we also have to know that when we turn the corner, and we work on a canine that we want to make sure that that canine looks just like the one we're looking at right now.

Because this is that ortho patient that came back that we alluded to earlier, their teeth look flare. A lot of it is because their canines instead of looking like this, they look like this and you're looking at it and you're like, "I just don't want it. It's not bad but it's not great." So, if we want great, we have to make sure we hit it to look like that. One of my favorite, favorite, favorite images right here angulation of teeth, and I always tell people you should chase the naval race. So, if you look at our centrals, they should be straight up and down. They should point out our belly button.

Our laterals, they're going to have to be a little bit mesial canted so they too can get to the belly button. Canine, the same thing. Premolars, you can look at this patient, they're almost in line with the canine because they're so close to being there. We want to create a slight mesial cant to our laterals and our cuspids and our first premolars. That's a very, very natural look. So, the same number three and tissues. I want you to also remember as we look at this next slide because sometimes, we can move teeth to do this. We can shape teeth to do this.

And other times, we can do what I was mentioning before. We can use a laser, or a scalpel and we can simply move where the apex of the tissue is, and we can create the illusion that that tooth is straight up and down, or has a mesial cant to it. So, a couple ways to skin the cat, so to speak. All right, next lesson on teeth themselves. We're going to talk about embrasures. So, they're just like there was a really smart guy on the West Coast. Another really smart person on the East Coast, Dennis Tarnow, was in New York out in New York, and he talked to us about some things.

So, I don't know that any of you have ever met a patient who liked to have that little triangle between their teeth and their gum tissue. So, the first embrasure we need to pay attention to is the gingival embrasure. So, we have to make sure that it fills in. Dental assistants, this is how you're going to help us dentists a ton. Hygienists, this is how you're going to help us dentists a ton. When we're working on teeth and we've got patients' temporaries and maybe they're numb on the restorative side or they're

numb on the hygiene side, I just need you to look at those cool rules.

If the most gingival extent to their proximal contact is less than five millimeters from the bone. And the only way you guys can check that is at the patient's not dumb. You're not going to sound bone with the [inaudible] without them being dumb. But if it is, then 100% of the time, even if there's a gap with those temporaries then we know at the final restorations if we put that proximal contact there, it's going to fill in every single time. This is really important on insert day.

So, everybody on the clinical team who's a part of insert day, if you're trying in a veneer or you're trying in a crown, and you put it in the mouth and you see that little black triangle. If that contact is five millimeters or less, it's going to fill in 100% of time. Don't worry about it, put it in. There's no reason to freak out. There's no reason to send it back to the lab. If you're milling crowns in your office. There's no reason to re-mill it. But if it's more than five millimeters, look at the numbers.

If it's just six millimeters, one more millimeter, it's only going to fill in half the time. I don't like that math. If it's seven millimeters, it's not even going to fill in a third of the time. So be predictable with your math. The other embrasures at the incisal edge, and this again, don't forget sin number one. Because some patients like that piano key lock everything's straight across. But most patients who want a really vibrant, youthful, natural smile, all you have to remember is as we move from center to the distal, embrasures open up incisively. A little more, a little more, a little more 20, 30, 40%.

All right, let's talk about bites. Has that patient walked in your office before? And when they walked in your practice where you like, "Oh, good gracious, what am I going to do?" So, we've been talking about occlusion for three straight weeks. In fact, I've very sadly gone to occlusion courses for three straight weeks. We're not going to do that, obviously. What I want you to bear in mind is really simple. When you see an obvious patient like this, you have to understand that we cannot treat them in their inherent bite, which you and I call maximum intercuspation.

We have to treat them in a position called centric relation. And the very, very short story for all of you who don't know much about that for our lesson today is we have to treat them where their jaw joint wants to open and close and where all the muscles support it. So super-fast think about this for any of you who've ever snorkeled before or scuba dove before. When you come out of the water and take that snorkel piece out of your mouth, and you bite down and you're like my teeth bite together differently than they did before. That position when you just took the snorkel up that centric relation.

So sometimes we as dentists have to adjust teeth, sometimes we have to treat teeth and restore teeth in order to get the teeth in harmony with the jaw joint. Now on the average patient, most of us, we don't need to worry about that. Because we don't damage our jaw that much. But on that patient, whatever we put in their mouth, it's going to go through the exact same process as that. So those patients we want to treat in a centric relation. There're a lot of people out there and they stress out how am I going to find it? How do I do it?

Again, not across an occlusion, but I'll give you a really simple way. I have to separate the back teeth for 15 minutes, you separate the back teeth for 15 minutes, and then just let your patient close. They're going to tell you, "Oh my god, I hit here first." "No, I hit first." And you'll have a really good understanding of where to interfere and what you need to do. And if you're not comfortable with that level of dentistry, then I would just highly recommend that you send those big cases to somebody who is. It's okay. You don't have to learn how to do it.

Just don't get involved in those cases because those are always the ones that come back with broken teeth, fractured crowns, or veneers and they're just not happy. It's just not worth it. All right, let's go on to our last bit here. We're in the home stretch, gang. I hope you're still awake and alive. So, let's talk about materials because there's lots of them for us to choose from today. And there's lots of things that impact our options. As a general guideline, this

is how I look at everything in dentistry, a patient presents with a problem, I can either treat their teeth directly, which means if I'm going to do that, I'm going to use composite, I have options.

I use a composite system where I layer 10 out of 10. I use a composite system, one shape a patient wants an eight and a half out of 10? All of which revolves around what I call the red zone, which is, to me a material thing. It's the retrievability of the material, it's the aesthetics and it's the durability of the material. So, I'm always thinking what's the red zone? What's the problem? What's the pathway? Because that's the other path. A patient says, "Gosh, David, I don't want to do this with composite, you told me they won't last as long. I want to do this once and I want to take great care of it."

Awesome, then we have to do it indirectly. We could do that two ways. We can impression it with physical materials, we can scan it digitally. We can use different ceramics to get there. And depending on 10 out of 10, eight and a half out of 10 how strong their bite is, how perfect their occlusion is. And we have different matches for different materials. So, I just want to briefly go through a high view of how I think about what materials and when. The pretty ceramic on the planet today as we sit here is classified. So, this isn't the brand, it's just a classification. It's Feldspathic.

So, the tooth that you see on the left-hand side of the screen is a single restoration we put on to match the other central incisor that has a notch in it on the right-hand side of the screen. You can see I battled the edge a little bit, but I just didn't have the heart to put a notch in it. It's so beautiful because of the inherent qualities of this material. Now the risk to it is it's really, really weak. So as a general rule in dentistry, the prettier the material, the weaker it is. But this is an awesome material. If you want a 10 out of 10 aesthetics and you can control the bite, you can control the function.

There's no steep overwrites, but you want to be super conservative. That's probably four-tenths, maybe five-tenths of a millimeter thick at the most. But if I need strength and pretty, I can't use this. This is for I really don't need a lot of strength. I just need beautiful. The next material

that's a little bit stronger, a lot stronger, quite frankly. We went from 90 to 550 mega Pascals is called Lithium Disilicate. There are other brands out there called Lithium Silicate. They're a little bit weaker than Lithium Disilicate.

So, this is dentistry as a workhorse, in general. You can see it's way stronger. It's also pretty good looking. So, in this patient, this was before we did ortho, but seven through 10 are veneered. And they disappear pretty nicely in there. Pretty easy, pretty darn strong. This is my go-to for almost everything that I do because it's a really nice combination of beauty and strength. And then we get to this because this is the most popular thing in dentistry right now, we get to Zirconia.

And depending on what Zirconia you use, there's lots of different strengths. There's also lots of different opacities to the material. So, if you want the strongest stuff on the planet, you're going to go to Zirconia. It's just really important for you and I to understand what Zirconia we're using. Again, not by name brand, but by classification. So, there is something in Zirconia called Yttria. It's a component of it. And I'm going to give you the 101 that you need to know because what you cannot do is write on a laboratory script. Please make me Zirconia crown tooth number eight. Because there's lots of different kinds of Zirconia.

So, in dentistry, what happened is when it first came out, when the Zirconia first hit the market, it had 3Y. It was 3 Yttria. And what happened for those of you who used it is you realized that it was crazy strong. It's like 1400 mega Pascal strong. But I'm betting a lot of you looked at it and said like that doesn't really look any better than my temporary. In fact, I think my temporary looks better than that. So that was 3Y. Then dentistry did what most of us do in life, we went to the total opposite end of the spectrum and we made this called 5Y.

And 5Y is really, really pretty. It looks a lot like Lithium Disilicate. But what happened is we figured out, it really wasn't any stronger than Lithium Disilicate, it was on a lower range of strength. So, what happened is all these dentists and assistants and teams were

prepping teeth minimally, putting on 5Y because it's Zirconia and it's super strong, and it all broke. So, it's not that it's bad. It's just you have to prepare the teeth differently.

3Y is not bad, you just have to be happy with an eight out of 10 because it's never going to be pretty. And then there are other manufacturers out there who've made four count. There are manufacturers out there who start at 3Y by the gum tissue, and as it progresses of the body of the tooth, it goes from three to four to a hybrid zone to five at the top because most things don't break. On the occlusal surface when it comes to Zirconia, they break down by the gum tissue. That's why they pop.

So, there's lots of different Zirconia and what I wanted to bring you to take home is, we have to know some things. The first thing we have to know is the Yttria count three, four, four and a half, five Y, understand which one you're prescribing. And if you don't know, ask your lab because I guarantee you, they have a favorite and a go-to. So, you have to fulfill the requirements of the material so it will last, and it looks pretty. You also have to understand that when it comes to 3Y, the reason it's ugly is because it's really opaque.

But if you're putting it on a second molar, maybe you don't care. But if you put it on a front tooth and you're like, why does this look so ugly? It's just because it's the wrong one. That's all. The last part is this when we look at Zirconia, we look at something called fracture toughness. So, we've always looked at mega Pascal's and you saw those big numbers before it doesn't matter with Zirconia. Fracture toughness really means one thing. It's when you're driving down the road and a pebble kicks up and hits your windshield and it nicks it. If you have a Zirconia that's fracture tough. What that means is the nick in the windshield stays there.

If it's not, it means it cracks your whole windshield. So, you want to make sure you're asking your lab, asking your reps do I have a fracture tough Zirconia? Is it 3Y, 4Y, 4Y, four and a half, five, whatever it is? And lastly guys, you could do all this stuff in composite. So, eight and nine, that's composite, it's not going to last as

long but it could look really, really nice. It's just not going to last you quite as long.

All right, this is something I want you to take home. Again, don't worry about it. If you want this presentation, I'm going to give you an email for me so you can have it for me. This is another something that we have laminated in every treatment room. It shows you how to break down shade. I want you guys to consider these things hue, value, Chroma. I know you remember them from school, but we have to imply them every time we work on teeth. We also have to look at the teeth themselves. Do they look like that? Are they fractured like that?

Do we want to minimally prepare? Are we okay with preparing teeth? Do we need to put a veneer? Are we putting a crown on? And understand that the more color we want to change, the more we want to change shades, the more space we need for our ceramic to hide color. So, if you're not making any shade shift, you only need three-tenths of a millimeter. If you want to change a lot, sometimes you need a lot of room to do it. Prep versus prep-less. The simple rule of thumb is there are very few cases that are prep-less. There are some that are minimally prepared.

But the only prep-less cases I see today are diastema closures when somebody is trying to close spaces or teeth that are lingual inclined, and they need to come facially. Other than that, we have to prep some teeth. And last but certainly not least, guys, we're just going to wrap this up with once we do all this stuff. If we're restoratively treating, we have to make sure we're using the right luting agent for the right material on the right prep. Because they're all very different from each other.

And when you do this stuff, I don't want you to rush. Nobody gets a medal of honor for

inserting 10 teeth at a time. So, don't be overly impressed with that. If you're great at it, if you're comfortable, you got a great lab, you got a great team, you do this all time, do it. If you don't take your time, just make sure you do the job once the right way. Because the worst thing to do is to have four, eight, 10 beautiful teeth, put them in and have something not [inaudible].

A couple tricks of the trade for you. Obviously, I'll tell you what we do in our office. So, our hygiene team is acutely aware of all this process because every single patient that gets any work done, goes right from our chair and has a hygienist come in. Because I'm going to do 99% of the job and then I want one of you guys or one of the girls to come and make sure I don't miss a speck. The worst thing I would ever want to hear from you is you left something behind. So, incorporate your hygiene team.

There's some great little tools. Those are Robinson bristle brushes. Di Tran is the only thing here I mentioned by name because it's a lab product. And it's like their little cheat sheet to polish up any porcelain. They make it for every specific type of porcelain. So, make sure you use a soft Robinson bristle brush and then get the appropriate Di Tran to polish your ceramics. But guys, those are our deadly sins.

This is how to get a hold of me. So, if you've liked this presentation, I am happy to share it with you. Please give me a couple days. I've got a few things on my docket, but I'm happy to share it with you. Or if you have questions, concerns, and you want more information than beyond the questions we're going to go through now. I'm more than happy to help you. This is one of my favorite types of dentistry and I just appreciate being here with all of you.