

Shrinking the Implant Learning Curve
Howard Speaks Podcast #29
Dr. Emil Verban
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Howard Farran: Well, today it is going to be a very fun hour. Emil Verban, thank you so much for joining me today.

Emil Verban: My pleasure.

Howard Farran: I am really excited about this, because you are a legend in implantology. And when I got out of school, no you truly are. And when I got out of school, placing an implant with a 2D panel, I mean, sometimes you would lay a flap and you would think you had an inch of bone and it would be this little paper ridge and you had to dissect out where the mental foramen was and you are always worried about the anterior loop and sometimes you would put a little pilot drill down there and you would stop and take an x-ray or two or three different angles. And now everybody is talking about, you know, these 3D x-rays, how we have gone from 2D to 3D. They are talking about surgical guides and all of that stuff. But before we get into all of that, what you have been doing for 38 years, I want to start this interview with, pretend that we are talking in our audience, 5,000 dentists, they just graduated from school in May. And they are entering probably the worst economy for a long time. I think all of the recessions you and I have lived through, they were kind of like a bouncing ball. They dropped and bounced back up, they dropped and bounced back up. We went through several of them. And this ball just kind of like dropped and it has just been laying there on the floor for five or six years. It is kind of crazy. So let's start this interview with, since you have been doing this 38 years, I have been doing this 27 years. What would you tell the graduating class and then lead that into the dentists that have been out there for ten years in this flat dental office in a city that is not gaining, it is not losing, it is just flat? There are 19,022 towns spread across America and they just say, "Dude, what is going on?" Should they try something new? Should they get into implantology? Some of them are looking at a machine, these 3D x-ray machines that are literally the price of a house. My first house cost \$96,000 in 1987. Now these 3D machines are \$100,000 minimum. So give them some fatherly advice. Give them your Vince Lombardi dental speech.

Emil Verban: Well, I think Howard, that if a young graduate does not get involved in implant dentistry, they are going to have a limited upside to the development of their practice. With the baby boomers, the aging of the baby boomers, that segment of the population is the segment that has the money. And they don't want to be like their grandmother and grandfather. They don't want to wear dentures and partials. And they

will seek out implant treatment if the implant treatment can be rendered in a cost effective manner, not only for the dentist, but also for the patient. I think that you will see in the future implant fees trending down, not trending up, because it is like the law of supply and demand. If there are only a few number of people who are doing the procedure, they can charge whatever fee that they so desire. But there are more and more general dentists that are getting involved in implant dentistry, rightfully so. And I think that with that number and increase, especially with the younger graduates that now are getting a little bit of exposure to implant dentistry in dental school, whereas I never received any education whatsoever in implant dentistry when I graduated in 1976. In fact, going back to the '80s when Branemark brought over the osteointegration theories, I wanted to get involved with implant dentistry, but there was a restriction from taking the Branemark course. It was only offered in dental schools and you had to be either an oral surgeon or a periodontist in order to take the class. So I was not able to take the class. So basically I had to learn implant dentistry, basically I think I am somewhat self-taught in the sense that I traveled around, I visited other offices. I read numerous books, but I think I am basically self-taught. And I think that, you know, I don't think that you have to go and take a \$20,000 continuing course in order to be able to place dental implants. Do you know how many companies sell implants in the United States, Howard?

Howard Farran: How many?

Emil Verban: 90.

Howard Farran: Wow.

Emil Verban: 90 companies sell dental implants and there are probably 340 different types of implants that are available. So I understand that there is a tremendous amount of confusion out there as to which implant system an individual would want to get involved with, where do they get their training and how do they get their training in a way that they don't break the bank, and let alone thinking of purchasing a \$100,000 3D machine. I think the 3D technology is fantastic technology, but I do not think that you absolutely necessarily have to have it in order to place dental implants. You know, I think 80% of all dental implants that are placed are single units, 80%. Well, you open any magazine and you see this all one four, the BruxZir, the full arch appliances, but that is not the bread and butter routine implant case that is out there. It is a lower first molar, that is the most prevalent tooth that is lost. And I think 80% of the implants are single units and I think I read where 70% of those 80% are posterior, and 30% are the lower first molars. So the lower first molar is the most prevalent implant that is placed and it can be the easiest implant to place. So I think young dentists have to go in a progression to learn this. They have to learn to separate which cases they should get involved in, and which cases they should not get involved in. And I think that the

organization that is out there, the ITI, the International Team of Implantology, they have a series of textbooks that are all evidence based consensus reports and they have a classification of implants called the SAC Classification, which is simple, advanced, complex and the parameters that goes with each one of those. And I think it is like anything else, I mean even an oral surgeon in their residency or a periodontist in their residency, at one point in time it is the very first implant that they place. It is the first flap that they have laid. So they have the advantage in those programs of being able to have someone looking over their shoulders while they are doing the procedures to get them up the learning curve. So I think that taking the responsibility to self-teach yourself is very important. And I don't think there is one course that is out there or a magic bullet, an implant that can be 100% successful. You know, the funny thing Howard is that all implants integrate. I mean, there have been studies no matter what type of implant system that is used, 95% to 97% success rate with the implants, whether it be a Straumann implant, whether it be a Zimmer implant, whether it be a Blue Sky Bio implant, whether it be a Megagen implant. All of the implants integrate, it is just a matter of what kind of support you are going to get with whatever system that you are using. And I think the bigger brand name companies, they at one time kind of had a corner on the market, but I think that is starting to change some. I think that Dr. Niznick with the Implant Direct has been, I think the downturn in the economy was the biggest thing to happen to Implant Direct, because he was going to have an Internet based company and produce a product and sell a product and significantly undercut the competition. And people I think were reluctant at first to get on board with that product, but then like anything else, as time went on, on a ground roots basis, the use of that implant has significantly grown just because people have realized that you don't have to spend \$425 for an implant. You can spend \$170 to \$150 for an implant and have the same success rate as far as integration is concerned. So I think that for the younger graduates they need to get involved with learning surgery. And you know, everyone wants to place implants, but you have to learn how to make incisions, you have to learn how to reinforce tissue, you have to learn how to drill in bone. And there is a learning curve involved and like anything else, with each particular case that you do, your skill set is going to increase. So probably the best advice I could find would be to take a basic course, decide on what implant system you want to go with and then find an individual that you can mentor with to increase your knowledge and bounce treatment plans off of prior to getting involved. Do you play golf, Howard?

Howard Farran: I do not. I was on the high school golf team.

Emil Verban: Well you know, it is kind of like this. Like if you were to take a golf lesson and go out on the range and hit like a seven iron and keep hitting the same shot over and over and over, you could take a lesson doing golf that way. Or you could take a playing lesson. And a playing lesson would be you would play a round of golf with a

pro. The pro would help you and prep you prior to each shot that you are going to hit. So like an example would be, okay, if you were going to hit a seven iron and you were like 150 yards away and you knew how far you were, but then 20 yards out there, there was this tree limb. So the pro would say, "Well now, you can hit the 150 yard club, but you are going to have to make some modifications in it." And that is kind of like what implant dentistry is. There are all kinds, each case is so different, a different set of circumstances that you have to see before you get involved in it. You know, it is kind of like an art appreciation class. You have to kind of visualize and see what problems you are going to encounter before you get into them. And even before you have a lot of experience, you still always run into scenarios that you have to revert back to your basics in order to do the case. So I think it is good if you can find a mentor, if you can decide on what system that you want to use and you can take some basic surgery courses. Just on Dentaltown itself, there are a tremendous amount of clinicians out there that are so willing to share their knowledge and expertise. And I think Dentaltown probably is and can be one of the most valuable resources. YouTube is out there, all kinds of videos are available. A lot of dentists have channels that you can go to and view their cases. And some people learn by reading, some people learn by watching, some it is a combination. So you kind of have to figure out which way you learn best and go from there.

Howard Farran: We have people viewing these from every single country in Earth and I think it is interesting how when the United States with the nine specialties recognized by the American Dental Association, these kids walk out the school and the ortho departments keep the ortho out of the curriculum and the oral surgeons keep the implants out. I think it is interesting how in more poor countries like Brazil and India and China, the actual general dentists place more implants per month than American dentists. And I believe you are absolutely right how the cost of these implants plummeting with Dr. Branemark from Sweden where IKEA is, that company turned into Noble BioCare after the Nobel Prize. And they were just bought by Danaher, which owns Implants Direct. What did you think of that move?

Emil Verban: I think it is a way that they can segment the market and address the needs of different sectors. So they are going to probably use that to push their implants to different individuals based on the requests of the doctor. You know, there are specialists that are out there that would not use a Blue Sky Bio implant. They wouldn't use the implant, because it is a clone implant. But the success rate of that implant is the same as a Straumann. So the specialists may not use that implant because if there is 2% of the cases could possibly fail, they don't want to have their referring individual know that they are using a clone implant. They would prefer to use the brand name implant. So obviously a lot of the general dentists feel as if the brand name implant is the only way to go. But there is a significant difference in the cost of those implants.

Howard Farran: We had an oral surgeon on here from Dentaltown, Jay Resnick, and that 2% he said that he does 100% surgical guide, because since he has referring dentists, if only 2% of his are angled wrong and he is placing them, you know, he will go through 100 pretty quick. He just doesn't even want 2%. What are your thoughts on surgical guides? What percent of yours are surgical guide versus free-handed for a lower first molar, which is the most common single implant you said.

Emil Verban: I mean, I use surgical guides all of the time.

Howard Farran: But what percent for a single?

Emil Verban: Well probably 90% of the singles. Now when you are talking about surgical guides, are you talking about a CT generated guide or are you talking about a model based guide?

Howard Farran: Well for our viewers, please explain the difference. Because that is one of the biggest threads, you see these threads on Dentaltown, model based. Like I said, I was so excited to interview you today, because when you look at Dentaltown, this is where CEREC was so hot five, six, seven, eight years ago and then ten years from that it was lasers and then ten years from that it was intraoral cameras. Right now what you are talking about, that is where the ball is of this dental football game. Everybody is talking about do I get this \$100,000 machine? Do I make a surgical guide based on a CT scan? Do I make it on a model? Explain the difference and what your thoughts are on all of that.

Emil Verban: Well, I mean I think that you can purchase a 3D machine and that 3D machine that you purchase, you might use that 3D machine more for regular dentistry than you would for implants. I have a Planmeca ProMax 3D machine. I take extraoral bite wings on children, on adults. I take 2D panels and I also take CBCTs with the same machine. So the return on investment on that machine is really good, because you can take these extraoral bitewings on children and they look like vertical bitewings and they are extremely clear and you can diagnose interproximal decay on them. So with that particular machine, yeah, it is an investment. But it is going to allow you to have that ability to fully analyze in three dimensions the ridge, as well as utilize it to place, with that knowledge, place dental implants. So like an example, I posted a case on a close family member where I did an implant. So I had a cone beam. I had a cone beam and the ridge was 10 mm, it was a lower second molar, the ridge was 10 mm wide. I was going to place a 4.8 diameter implant. I didn't feel as if I needed a CT generated guide if I knew and I could see where the first molar was, where the second molar was that I was going to place the implant. A simple model-based surgical guide was sufficient for me to keep me centered in the position I wanted to be to place the implant. I mean, I was 12 mm from the inferior alveolar nerve and I had 2.5 mm of

space on each side. So in order to make a surgical guide, I just made it on a model with some acrylic. And I have got a product that I developed and patented that I use and sell to many dentists all over the world. It is a drill stop. And so my drill stop prevents me from drilling deeper than I want to go and also with the advent of guided surgery, you can form the guide around the drill stop that will allow you to control all three dimensions with your placement. There is a dentist, Michael Ravens, who has done a lot of fantastic work using Blue Sky Bio's free software that you can download and has a way to scan a model, superimpose the model of your scan over your cone beam and generate a model from that and make a surgical guide. But you know, that takes time to do that and there is some added expense in it. And it is fantastic, but I think you can do the same thing with just simple, model-based guides as long as you have an idea of what the anatomy is underneath the tissue. You had mentioned that, well, when you first got out you laid a flap and then there was this tiny ridge. Well, now there is no need if you have a 3D machine, there is no need to have any surprises whatsoever. The only surprises that you can have is sometimes the 3D machines have scattered, there are a lot of crowns, adjacent teeth with adjacent crowns. So it is sometimes hard to get the full visualization of the anatomy of the ridge due to the scatter. But guides can be made and I would highly recommend that guides be made for all dentists when they first start practicing and placing implants.

Howard Farran: Any chance I could get you to commit right now to create an online CE course showing how you do that, going through the steps, using the product that you sell?

Emil Verban: Sure, I could do that. That wouldn't be a problem at all. I would be happy to do that. I mean, I have a lot of people that call me all of the time and I just point them in a direction of how to use the product. I used to teach classes in my office, like five doctors at a time for two days, kind of like Jerome Smith does in Louisiana. And Jerome is a fantastic implant dentist. And he is kind of out of the same mold that I am in the sense that he was kind of like self-taught and we do IV sedation. So we do all of the cases. But he would be another individual that you should talk to at some time. He told me a funny story one time about how you went to visit him in Louisiana I think.

Howard Farran: And I am going again next week. Yeah, we were down there and then we went fishing for red bass out in the Gulf. I love Jerome.

Emil Verban: Jerome is a great guy.

Howard Farran: And when everybody is whining about the economy, there is he is Lafayette, Louisiana, which Louisiana, Mississippi and Alabama, they are usually near the bottom of the list in economic performance and whatever and there he is out there placing 50 to 100 implants a month for 30 years of his life. It is amazing.

Emil Verban: Well I think that the economics, people have to take a strong, hard look of the economics of implant placement. I mean, I hear numbers of an individual that goes and needs a single tooth implant replaced and it is going to cost them \$5,000. Some offices are going to charge \$5,000 just for the surgery. So I think there is a price point in our fees that if you want to be able to do a lot of implants, you are going to have to be competitive with your pricing.

Howard Farran: And it should be. I mean, I remember when I got out of school, Noble Biocare, it was \$500 for the implant, but every little thing you bought was another \$50 to \$75 from a helium bottom and a screw and just nicked and dined you to death and these prices have plummeted in implants. And in economics, the first thing they teach you is price, elasticity in price is the number one variable on the elasticity of demand. If you raise your price, you are going to sell less and if you lower your price, you are going to sell more. It is price elasticity and a lot of dentists would do twice as many implants if they could just cut their costs in half. And it is amazing how the number one market share leader in every company in America is a low-cost provider. Southwest Airlines, number one in airlines, lowest price. IKEA furniture, where Brannemark is from in Sweden, lowest price furniture. You know, Wal-Mart, lowest cost distributor by getting rid of the middle man. I also think it is interesting you bought a Planmeca, which is out of Helsinki, Finland, and they are 3D and they just made a huge investment in E4D out in Dallas, Texas. It is like all of dentistry is going 3D and CAD/CAM.

Emil Verban: Yeah, there is a movement that way, definitely there is a movement that way. But I think there is a difference between the types of implants that you use. Okay, so there are bone level implants as you well know and tissue level implants. So tissue level implants are far more easy to restore in my opinion than bone level implants in the posterior area of the mouth. So to give you an example, you could use a Blue Sky Bio tissue level implant that, unfortunately they just raised the price of their implants from \$95 up to like \$105 I think or \$110. But that same implant, for \$110, you could place a Straumann implant for \$355. So there is \$200 of profit margin right there for you. And your success rate will be the same with both implants.

Howard Farran: Okay, I am going to stop you and interrupt you and start a whole new feed to the fire. These dentists, they are usually introverts. They are usually, what got you into dental school was getting A's in math and physics and chemistry and biology, so they are usually shy. They are usually introverts. There are a ton of them out there that have been watching all of this 3D x-rays, all of these big threads on those. Let's start going specific advice. Let's say I am a dentist, I have been out of school five years. The first thing I want to do is I want to take a course. Can you actually name courses? I mean, would you recommend that he goes and see his oral surgeon or would you recommend that first he chooses the implant system and works backward from that? So start naming, give someone a Betty Crocker Cookbook recipe. What

implant system? Does he need a CBT, what machine? Should he make model-based surgical guides or CT based surgical guides?

Emil Verban: I think that if you wanted to go with a company that has a lot of options for you, it could be Implant Direct, because Implant Direct sells all of the types of implants. They sell the clone compatibles, they sell Nobel compatible, they sell Zimmer compatible, they sell Straumann compatible. So, you know, you can buy everything in one location.

Howard Farran: And for the younger kids, just tell them a couple of minutes about Jerry Niznick, because for older guys like us he has been a legend. He is the founder of Implant Direct and he has been a legend in implantology. He is like another Branemark, wouldn't you say?

Emil Verban: Oh yeah, well Jerry Niznick developed the internal connection. So he developed the internal connection that he then sold to Zimmer, the patents to Zimmer, and then when the patents ran out on that internal connection, then Zimmer had a facility that was available. He bought the facility and started Implant Direct. So his goal was to be the largest seller of implants at a moderate price so more consumers could actually afford implant dentistry.

Howard Farran: And he is out there in LA, isn't he?

Emil Verban: Yeah, well he is retired now, because Danaher bought out.

Howard Farran: So to make things simpler, faster, easier, you would recommend Implant Direct because it is a low-cost?

Emil Verban: Right, I would recommend Implant Direct, or say Blue Sky Bio. Now the difference between Implant Direct and Blue Sky would be that Implant Direct is a little bit larger, they have a little bit more continuing education. They offer courses, Dr. _____ August, he has a couple of threads on Dentaltown and he has been a big contributor to implant dentistry for the general practitioner. So they have courses that are available. They have a two day course and then they have added courses after that that are more sophisticated. But when you break it down, in a lower first molar region where you have an abundant amount of bone, that is a simple implant. Then you are not going to add a lot of implants into your practice unless you learn and know how to do sinus lift procedures, crestal sinus lift procedures, because you limit your availability of where you can place the implant. So with some of the simpler techniques that are available now for crestal sinus lifts, you are just going to expand the number of case opportunities for you to place implants. So in all of those courses, there are certain doctors that teach individual courses. One of the good courses that is available out there is a Arun Garg. He has got fantastic continuing courses. So you want to try and find a course that is,

you know, close to your geographic area so you don't have to spend a tremendous amount of money in airline travel and everything. In fact, now they even have courses where you can go to the Dominican Republic, Honduras, different places and you can have hands-on placement of implants. That is how you are going to learn extremely fast.

Howard Farran: And so you recommend the hands-on courses?

Emil Verban: I definitely recommend the hands-on courses.

Howard Farran: So is August, is he mainly teaching for Implant Direct?

Emil Verban: I don't think he is mainly teaching for Implant Direct. I think I have seen his name on the site. He teaches certain courses for them, but I don't think he is only teaching just for them. He is also involved with CEREC, so he teaches how to integrate and how to use the newer technology to develop surgical guides.

Howard Farran: With the Galileos?

Emil Verban: Yeah, with the Galileos.

Howard Farran: Well talk about that for a second, because that is a big deal. Apple, your iPhone, you think of Apple as a closed system and you think of Google and Microsoft as an open system. So Serona owns the Galileos CBCT and the CEREC CAD/CAM. You went with an open system, Planmeca. So when a doctor is looking at a 3D x-ray machine, going from two-dimensional x-rays to three-dimensional, would you recommend a closed system like Galileos and Serona and CEREC, or would you recommend an open format like Planmeca and E4D?

Emil Verban: You want me to make some enemies today, don't you? Okay.

Howard Farran: I don't think it is enemies.

Emil Verban: I have got an Apple, I have got an iPhone. I am talking on a Macintosh MacBook Pro right now. I love Apple products. But I think that you lock yourself in. I mean, a phone and a computer are a little bit different than an x-ray. So I mean I think that that is the reason that Planmeca bought E4D, so that they could compete with the closed system. So they are still an open system, but they can compete with what the closed system Serona has right now with putting together the intraoral scanning together with the DICOM that you get from the cone beam to be able to generate surgical guides. But you know, I think that guided surgery is overrated.

Howard Farran: Really?

Emil Verban: Yes.

Howard Farran: Why is that? I have not heard that before.

Emil Verban: Well, I think that, well I have only had a cone beam for two years. And I have placed thousands of implants more without a cone beam than with one. Now that information has definitely helped me in I would say improving my placements, but I think what the cone beam did for me was it allowed me to – ten years ago you had to work to sell cases to patients. Now with the cone beam, you have eliminated any doubt that they have if this is good for me, because you can put the x-ray up on the screen, you can show them where you are going to place the implant. You can go through the whole planning of it. It relieves any doubt that they have in mind and they are impressed with the technology.

Howard Farran: Oh, they are impressed.

Emil Verban: They are. I mean, so if I take a cone beam, and like I said, the nerve is four millimeters or five millimeters away from where you are working and you have three millimeters on each side, I mean, I don't think you need to do that case guided. You can do a model based guide for that.

Howard Farran: I am going to stop you here, because to our viewers out there at every level of age group in every country, you are throwing around terms of model based surgical guides versus CT guides. Can you kind of explain that more to the person who doesn't understand what the difference is and which one should they be doing?

Emil Verban: Well I think that there is nothing wrong with doing fully guided surgery. Obviously there is nothing wrong with it. There is a cost involved in that and in many cases, that cost, in my opinion, is not justified if you have a certain level of experience. If you do not have a certain level of experience, then maybe that can be a safety net for you, because the guided surgery, the guide itself will help keep you on the trajectory that is within a safe zone so that you know that the model, the guide is controlling the trajectory of the implant and it is also going to help control the depth of the implant. So it is going to be a safety net for new dentists getting involved placing them. But that is not the same thing, Howard, as using guided surgery to dumb down the complexity of implant dentistry or to be doing flapless surgery, because there is a big move out there to doing flapless surgery and I think it is hyped and marketed by some companies. But I do very few flapless surgeries.

Howard Farran: But back to making the actual surgical guide, they could be made on a model and they can be made CAD/CAM. What are your thoughts on the difference in those? Mostly more expense? And furthermore, have you seen Armen's system, Armen Mirzayan?

Emil Verban: Right, no I have seen his system. Yes I have.

Howard Farran: So what do you think of a surgical guide, like on the Dentaltown thread, the Blue Sky surgical guide made on models versus something that is designed CAD/CAM?

Emil Verban: I mean, I think what Michael is doing with the Blue Sky plan and having the models printed out that are your plan, I think that is a good way to go, I really do. But I think that some of the approach that they are using could be even simplified even more than what it is doing. But you also have to take into consideration that, you know, anything with computers, garbage in, garbage out, so you have got to be precise and accurate and understand the software and understand what you are doing in order to go that route and take and stitch the models together and overlay the scan of the model of the mouth to the DICOM image that you have on your computer system. So there is a learning curve with that, but it is a good way to go for many people and it gives them a great sense of security. I just was not trained that way. I would open things up, visualize it and then go from there with the implant placement. And I still like to see the bone, and again, I do very little flapless surgery.

Howard Farran: Now what 3D CAT scan machine do you think they should buy? If you are a dentist out there in the middle of Parsons, Kansas, and he is at the ADA Convention. Now how many companies are selling a 3D CAT scan CBCT for dentistry?

Emil Verban: I don't know, there are at least a dozen.

Howard Farran: Yeah, so help that young kid out. He is 30 years old, he is in San Antonio right now and he is like, "What do I get and why?"

Emil Verban: I would only get a cone beam machine that you can also take panoramic 2D panels with and you can also take extraoral bitewings with. I would want to do all those three things with one machine. If you can do all of those three things with one machine, you are going to have a bigger use of that machine. I mean, I use my cone beam on endodontics all of the time, because you are able to take a limited view of the tooth, you are able to see the anatomy and it is a humbling experience when you take 3D films of some of your old endo cases.

Howard Farran: Yeah, the first time I took, I got a Carestream, and the first time I took a 3D of my root canal fill, I was all excited to see it. And I was going through the slides and I was just like, "Oh my God." I mean, it is just like wow. That is a humbling experience. And when the endodontists are telling us that missed canals are the number one cause of root canal failure and you sit there and numb up the tooth and before you go in there to go through that tooth and just sit there and think, wow, there is absolutely another canal over here. And once you see that, it is just like you find it instantly.

Emil Verban: Correct. I mean, do you take extra-oral bitewings with your 3D machine?

Howard Farran: You know what, I am so sorry. The hygienists and the assistants do that.

Emil Verban: I am not specifically saying you, but in your system, do you go into a room and they have it up on your system and it is a bite wing that they took extra-orally with the machine? Are they taking intra-oral bitewings?

Howard Farran: You just caught me, I have to tell you, I don't know. I don't know, but I will find out on Monday. Jan has been with me 27 years and I don't know what she is doing. But it is all digital on the screen.

Emil Verban: But I think that is a big drawing card. In some of the machines, you can do it and other machines you can't.

Howard Farran: And then some people are getting all legalese saying that it is insurance fraud, because technically according to the ADA, a bitewing has to be inside the mouth and the sensor was outside the mouth. I am just like, "Okay, whatever."

Emil Verban: That I don't know.

Howard Farran: Yeah, that is crazy talk. So you would recommend starting with a company like Implant Direct, Blue Sky Bio, looking at what CE courses, probably lecture first, and then you would definitely recommend the hands-on. You talk about Arun Garg, yeah, he is a good friend of mine. I have lectured for his group and he is opening up a hands-on center in the Dominican Republic. I don't know why the Dominican Republic is exploding, but it seems like every time I turn around I hear of more people doing a Dominican Republic. Is Arun tied with an implant company or does he recommend anyone specifically?

Emil Verban: I don't think he is tied in to one particular company. I think that is one of the problems where some of the courses in the past, the course was really structured to push the sale of one particular brand or one particular system. And so, you know, to disseminate the knowledge and the information is an expensive project. And I think that, you know, Blue Sky Bio, Sheldon and Albert Zickmann, when they first came on board with their company, they really didn't want to have people that are just getting involved in the profession and placing implants. They would say, "Go take a Straumann course and kind of learn how to do it and use those companies to get your feet wet. And then once you kind of know what you are doing and you don't feel as if you need a rep next to you while you are doing that or help you order all you need, then just go online and buy our product."

Howard Farran: Now you are in Bloomington, Illinois. That is a suburb of Chicago?

Emil Verban: Well, Chicago is a suburb of Bloomington, Howard. No, Bloomington is approximately 120 miles south of Chicago.

Howard Farran: So you are halfway to Effingham then?

Emil Verban: Yes, probably.

Howard Farran: About halfway to Effingham. And how big is your town and what percent, you have been talking about implants the whole time. You are a general dentist, what percent of your practice is implants? Are you doing other things, too?

Emil Verban: I have a general practice, so I practice by myself. I don't have an associate. And I probably, I mean, I do endo, I do sedation dentistry, IV sedation. I have a nurse anesthetist that comes into my office on more complicated cases. So implant dentistry is not all I do and I don't think you can, as a general practitioner, just do implant dentistry. But you know, I probably place over 200 to 250 implants a year.

Howard Farran: That is an amazing amount. That is a very amazing amount. So you are doing molar endo, too. Are you doing the CBCT after each fill to look at? Are you doing it before the endo or after?

Emil Verban: I am only using it when I have problem cases or especially for retreatments, yes. You know, it is a good way to have a film and, you know, now I am beginning to question whether or not I want to take a panel and bitewings on some new patients or whether or not I just want to take a cone beam and using that for diagnostic purposes. Because it is truly amazing how many asymptomatic periapical lesions you see on cone beams anymore.

Howard Farran: I am wondering, I am two-thirds down, I am 40 minutes down. I only get you for 20 left. I want to switch to a whole different area. You know, a lot of people who talk about implants, like say Jay Resnick, oral surgeon. They just place them, they never restore them. On the restoring side of them, it is a huge debate about loading an implant immediately. Some people want it in there for three months, some people six months. There are different types of bones. Will you tell these young dentists about different types of bone and when can you do a single-visit implant and a crown and they walk out with a loaded tooth and when that is a horrible idea and you want to let that thing settle in the bone and osteo-integrate for a long time. Can you go in that direction for a while?

Emil Verban: Sure, I mean, I could use the analogy that I use with my patients when I say that there are three types of bone in the mouth. There is oak, pine and balsa wood. And so oak is more the lower mandible and anything is successful in the lower mandible. Pine would be more the anterior maxilla and balsa would be more the

posterior maxilla. So with that in mind, I think it is very difficult to do immediate placement, immediate loading in the posterior area unless you have posterior stops distal to the implant that you are placing. And when you make that, you can keep the tooth out of occlusion. I think the more things that you try to do, obviously the greater number of risk factors you can bring into the success of the case. I have done many anterior placements with immediate provisionals, but you have to have...

Howard Farran: Are you talking about upper or lower?

Emil Verban: Both. Immediate placement of extraction, immediate placement and a provisional, walk out with a tooth all in the same day. But I think you have to exercise common sense. You have to have a posterior support. You have to have a way that in excursions and protrusive and lateral movements, you can free the opposing arch from touching that implant provisional.

Howard Farran: So you are saying that if it is a single tooth implant and you have a tooth taking the force behind in a posterior stop and in front for a protrusive lateral, all of the movements, and the tooth was out of occlusion, you could load that day or have cosmetically a tooth there for many cases?

Emil Verban: You could, but I usually don't do that in the posterior area. I know people that do, but I don't do it in a posterior area, because if you can't see it, why take that risk?

Howard Farran: And how long would you let that osseointegrate before you would bring them back to load it? What is your protocol on that?

Emil Verban: I have a machine that is called an Ostell, and I don't know if you are familiar with that, Ostell meter. So it is a machine that measures, gives you an ISQ reading, which is an implant stability quotient, and it tells you how stable that is electronically. I mean, you can place an implant...

Howard Farran: Will you spell that out? Does it have a www?

Emil Verban: Yeah, O-S-T-E-L-L.

Howard Farran: O-S-T-E-L-L.

Emil Verban: Yes, Ostell.

Howard Farran: Dot com?

Emil Verban: Yes.

Howard Farran: Okay, Ostell.com. And so you will get a reading?

Emil Verban: You will get a reading. So that reading will allow you to know whether or not this is a candidate you can do an immediate provisional on. If you don't have enough stability with the implant, then you cannot do an immediate provisional on that particular...

Howard Farran: And on your Ostel machine, what reading do you want to see? What number are you looking for?

Emil Verban: I am looking for a number of a 70 or more.

Howard Farran: A 70 or more, okay.

Emil Verban: Right. And so also with that machine, you can place an implant and you can take a reading the day you place the implant. Say like an upper posterior bicuspid. You take a reading and the reading says it is 55. So then you bring the patient back in five weeks. If you do a one-stage procedure where the healing cup is open, and you could unscrew the healing cup, screw in and take another reading. If initially your reading was 55 and five weeks or six weeks later you have got a reading of 30, you are probably going to have a failure. But if your reading is say up to 65 or 70, then you could go ahead and load that implant.

Howard Farran: And you have been placing implants for 38 years. So tell these inexperienced people, what are the failures usually? Is it a smoker currently smoking? What if they stopped smoking five years ago? Talk about age factor. You know, obviously a 25-year-old would heal better than a 50-year-old, who would heal better than a 75-year-old. Is there an age limit where you stop placing implants?

Emil Verban: No, last week I placed an implant on a 93-year-old.

Howard Farran: Wow. And I noticed in some of the ads in Phoenix, Arizona for the plastic surgeons, some of the people that are kind of famous around town, even in their ads, they say you must stop smoking for four weeks prior to surgery. And I saw that in the paper and I thought, wow that is amazing. The guy is doing external marketing trying to get new patients, but he is throwing a big red flag out there. You know, if we are going to do this, you are going to have to quit smoking for four weeks. Is smoking a big problem in your experience?

Emil Verban: Well, I think that if you had a choice you would rather place an implant on a non-smoker than a smoker, but I personally have not seen a greater failure rate on smokers than in non-smokers. Personally, myself I have not seen that.

Howard Farran: And what about age? So age and smoking isn't really, you are not seeing age and smoking being a variable?

Emil Verban: No. Age is a variable when you don't want to place an implant in too young of an individual.

Howard Farran: Say that again.

Emil Verban: Age is a factor where you do not want to place an implant...

Howard Farran: If they are still growing?

Emil Verban: If they are still growing or if they still have passive eruption, especially in the anterior region. So for a girl, that would be, you know, 18 or 19, but for a boy 21 or 22 sometimes.

Howard Farran: So what trends or commonalities do you see in your history of failed implants?

Emil Verban: I think where you try to push the edge of the envelope too much. Where you extract the tooth and you do an immediate placement and maybe you didn't get as good of initial primary stability as what you needed to, but you went ahead and did it. So probably, and then cases where just for whatever reason, and sometimes it is totally unexplainable why the implant fails.

Howard Farran: So if you were going to pull a tooth on me and you are saying pulling the tooth and placing the implant you have had a history where sometimes that is not the best idea. Would you pull the tooth and let it heal up for how long or would you pull the tooth and put in a bone graft? Would it be real, synthetic? Would you harvest it somewhere else? Talk about that.

Emil Verban: Well, if you were to come in and you had, say, a lower first molar extracted and it needed to be extracted and the buccal plate was intact, you didn't fracture the buccal plate. And I would say, "Well Howard, do you want to replace this with an implant?" Oh yeah, I want to replace this with an implant. "Okay, well if you tell me, Howard, you want to replace this with an implant, we will go back in in five weeks and we will place an implant. But if you can't tell me that you are going to follow through with this, then it would be good to bone graft the site to give you the option for implant placement down the road. But if you commit now to the implant, we won't do the bone graft. You will save yourself \$350 and you can apply that to the placement of your implant."

Howard Farran: Okay, so first of all let's say I can't afford this until next year. What would you bone graft it with? Synthetic, real, human cadaver? What would you do the bone graft with?

Emil Verban: Well, I use a wide variety of products. I use a demineralized, freeze-dried bone. There is a product called Encore that is a combination of mineralized and demineralized that I use. There is another product called Grafton. I have tried, there are different manufacturers of the bone. I don't know if it is significantly different. I think they all...

Howard Farran: For a lower molar, would you place a membrane? Would you do a bone graft and put a membrane?

Emil Verban: I don't use a membrane unless I have to repair a fractured buccal plate.

Howard Farran: Okay, and if you are not using a membrane, would you use resorbable gut or a synthetic where they have to come in and have the suture removed?

Emil Verban: It depends. If it is not an issue for the patient to come back, you could use silk, cheap silk if you wanted to. Or you could use Cytoplast sutures or a nylon based product. I don't think that whatever type of suture material you are using in a situation like that you are going to be able to look back a year later and say, "Oh, you used silk here. You used a Cytoplast suture here." I don't think you are going to be able to tell that.

Howard Farran: Okay. So we are down to just eight minutes. What other advice or something that you want to talk about that I am not smart enough to ask you to talk about?

Emil Verban: Well, you know I have always been, and people that have been on Dentaltown and followed some of my cases that I have put on, one thing that I have noticed is, oh, ten years ago on Dentaltown if you were a general practitioner and you were involved in implant dentistry, you were catching a lot of rift from the specialists that you were involved with this. They were trying to pin you to the wall, why did you do this and this and that. So there have been some heated discussions with various people that the moderator basically had to step in and calm these people down. So I think that one thing that I have noticed on Dentaltown and a credit to you and the whole site is that now you are really seeing a community of people that share ideas, that are not excessively critical, not nearly as critical as what they used to be towards each other, because it is more of a sharing environment and it is a tremendous place to learn and learn from other individuals that are willing to take the time. Because it takes time to put the photos together and load them up and do all of that. So for me, it is kind of like an avocation almost. I mean, I really enjoy doing it. I like the teaching aspect and I am always willing to help someone else get up the learning curve as far as the placement of implants are concerned. But I think that one, if an individual does not want to get involved right away placing dental implants, at least they have to be able to do surgical extractions. They have to learn how to section teeth, how to remove teeth without

fracturing the buccal plate. Even getting involved in following Resnick's posts concerning wisdom teeth extraction, because you have to be able to be extremely comfortable working laying flaps if you are going to get involved in implant dentistry, because every case is not going to be ideal where you have 10 millimeters of attached gingiva and you can do a flapless procedure. It seems like the people that have the money don't have the bone, and the people that have the bone don't have the money for the treatment.

Howard Farran: I have not heard that one, that is a good one. And I want to make a comment about what you said about the Dentaltown atmosphere. I feel that the single largest mistake I made when I started Dentaltown is I thought, "We are all dentists, we are all adults. I would find it insulting to go in there and edit your posts and tell you what you can say and can't say." So I kind of had the hands-off, Libertarian approach. And Howard Goldstein had 30,000 posts and he would just keep beating me up, beating me up saying, "There are cyber bullies, there are people that are just mean. And they just ruin it. There is something wrong with them. You need to get a report abuse button and you need to kick this guy out." And finally, it took Howard a long time, and finally I said, "Well, why don't you sell your practice and you do it?" And it was a huge commitment for him, but he loved Dentaltown and he was so committed to the community. He sold his practice, he did it full-time. He set up the report abuse and we are all struggling with patients and insurance and bacterial infections and Streptococcus mutans, the last thing we need to do is eat each other. And he has really turned the Dentaltown community into one of a safe place you can go and share and someone might pat you on the back and say, "Great case. I might have done this a little different," as opposed to, "Dude, you should never do an implant again. You are an idiot." You know, it is not what you say, it is how you say it. And I have been a big fan of your posts and a big fan of your cases. How many implant cases do you have on there?

Emil Verban: I don't know, pages.

Howard Farran: Yeah, I mean, it is just amazing. And I want to personally thank you, seriously. I mean, you never got paid a dime to post those cases. You put countless hours of posting with love and affection and sharing. And you often don't get to see the feedback, because you know I lecture all around and these introvert dentists, 90% of the people on Dentaltown have never posted a single time. They are all lurkers. And when they come up in a seminar and tell me it is the greatest website, they name guys like you by name. That is why when I started doing these podcasts, I wanted to go with the names that people are talking about from here to Poland to New Zealand to Tanzania. All around the world they call you guys by your first name and it is amazing what the Internet has done to the learning curve of dentistry or take information from a guy like you and have it in 220 countries in a minute.

Emil Verban: Well, thank you. Thank you. You know, I truly enjoy what I do, even though I am 65 and have been doing this for 38 years. I still want to continue with what I am doing, because you can never be, you know, dentistry is trying to create the perfect imperfection I say. And so you can never be perfect at what you do. There is always room for improvement. But this site allows everyone, at least they can go to the site and they can compare where they are and what other people are doing and how they got their job done, because there are many ways to do things. There is not just one way of doing it. So there are many different approaches and you will come out with the same end result with using a different implant or using different membranes, different grafting material. So there is a wide variety of resources that you can use and you will still come out with the same end result.

Howard Farran: And the question that everybody wants to know, you are in Illinois, so are you, gosh are you a Cubs fan, are you White Socks? Who are your teams out of Illinois? I see you are flanked by two baseball pictures.

Emil Verban: Well, I tell you what, my father played professional baseball.

Howard Farran: Really?

Emil Verban: And I live halfway between St. Louis and Chicago. So my father played for the St. Louis Cardinals as well as the Chicago Cubs. So I can go both ways.

Howard Farran: Wow.

Emil Verban: This year I am a Cardinal fan.

Howard Farran: A Cardinal fan?

Emil Verban: Yeah, but I like the underdogs, so the Chicago Cubs, they are going to be a team to be reckoned with in the future. Although I did have a woman in my office the other day that was 100 years old and I asked her, I said, "Do you remember the last time the Cubs won the World Series?" And she said, "No, I do not remember."

Howard Farran: Is Chicago the only American town that supports two baseball teams in one town?

Emil Verban: New York, you have the Mets and the Yankees.

Howard Farran: Okay. That is amazing.

Emil Verban: And in Los Angeles you have quite a few.

Howard Farran: They say in Chicago that they have two baseball teams and one is a baseball team and the other one is an open bar where people just go there to drink.

Emil Verban: Yeah, that is Wrigley Field.

Howard Farran: Yeah, Wrigley Field, they say that is not really a baseball stadium, it is an open bar.

Emil Verban: Yeah, but you have the South siderers, so there are the White Sock fans, and the North siderers and Chicago Cub fans. But Chicago Cubs fans are probably the most loyal fans in all of baseball.

Howard Farran: Yeah, and that is in Wrigley?

Emil Verban: That is at Wrigley. If you ever get a chance to go to Wrigley Field, you should go sometime.

Howard Farran: Okay. And on that note, thank you buddy for all that you do for dentistry and for Dentaltown.

Emil Verban: Well Howard, thank you. It was an honor sharing this hour with you. And truly if anyone has any questions, feel free to private message me on Dentaltown and I will be happy to answer any questions.

Howard Farran: Alright, that is the spirit buddy. Thank you so much. Bye.

Emil Verban: Sure. Bye.