Dr. Gould:

All right, everybody. Hello out there. Welcome to Get Your Smile On. I am Dr. Joel Gould, your wellness dentist. Tonight, I'm very excited by our guest. Sorry, as usual, broadcast is at beautiful Manhattan Beach, California. Tonight's guest is a little bit of a departure from what we've been on the past couple of episodes. We're going to leave sleep apnea and Vitamin D issues, and we are going to move back into more the dental round. I'm very excited to announce my guest for tonight. It is Dr. David Isen. Dr. David Isen is a graduate of University of Toronto with the Bachelor of Science in neuroscience. He is a graduate of the University of Western Ontario in London, Ontario Canada where he got his Doctor of Dental Surgery degree. Since then, he received advanced training at Montefiore Medical Center in New York for intravenous sedation.

That sounds kind of scary, but we're going to actually break all that down and let everybody know that what tonight's episode is about is Sleep for Dentistry. We're talking about sedation and family dentistry and the idea that there are people out there shocking who are really just too afraid to go to the dentist without some form of sedation. As a general dentist, I do some sedation and I kind of stay away from the more difficult cases because in my office, we're not really set up to handle these particular difficult cases. There are specific dentists who really focus on that, and Dr. Isen is one of those dentists.

So, before I bring him on, I also have to sort of put a disclaimer on here. I'm also a graduate of University of Western Ontario, and I just so happened to graduate the same year as Dr. Isen in 1991, and in fact, Dr. Isen is a close personal friend of mine and not only is he a talented sedation dentist, but he's also an incredible order and lecturer and he travels around the world lecturing on different topics that are related to dental anesthesia. He is a very interesting guy and a great speaker, and without any further ado, Dr. Isen, are you there?

Dr. Isen:

Hello. Thank you, Dr. Gould, for the wonderful introduction.

Dr. Gould:

All right. I think that since we are good friends for many, many years having both being in the practice coming up on 25 years, which is shocking, you can't tell from the sound of your voice, I'm going to call you, David, and feel free to call me Joel.

Dr. Isen:

Thank you very much. That's great.

Dr. Gould:

Okay, well, I want to start at the beginning. I know how and why you're gone to dentistry, but I wanted to start to talk about how you became aware of and got into the whole issue of sedation dentistry. Refresh my memory, and let's get our listeners know what does the dentist do to sort of discover that that's something they're interested in.

Dr. Isen:

Back in the early 90s when we graduated from dental school, sleep dentistry and even dental anesthesia as a possible specialty wasn't really well-known or taught up by the vast majority of dental practitioners. So when we left dental school, when I left dental school, I had no idea that there was this sort of sub specialty or sort of niche type of practice where you could actually cater the people who have fear or medical issues. And in fact, it was only by chance that as an associate, I started working for a very well-established dental anesthesiologist followed by the name of Dr. Mel Hawkins who is my mentor. I didn't think I was getting into a dental anesthesia sedation practice. I just thought I was going to be doing dental dentistry. I called on him. He needed an associate. That was close to where I live, and it looked like a great place for me to practice.

Well, my first case was this young 21 or 22-year-old woman who needed a buccal pit restored on a lower first molar, and she was terrified. Dr. Hawkins came in and started an intravenous and sedated her and I'm looking, "What's going on here? This woman needs a buccal fit restoration, and you're putting her to sleep with this minor procedure." That's how it all started, and then slowly, my ignorance was quelled and I came to learn that these people won't come to the dentists, they won't get treatment done, the vast majority of them who are truly fullback unless there are some sort of help for them; and, sedation is one type of methods to get these people through these difficult times for them. I learned it, I found out about it by mistake, and it sort of fell upon it.

Dr. Gould:

Okay, it is pretty fascinating. Now, for everybody listening, I know we've had some international guests and you have your practices in Toronto, Canada. I'm pretty sure everybody listening knows where that is, so we're really happy to have you on. I wanted to talk about a couple of different things and I want my listeners to understand the different types of dental anesthesia that one can have. Maybe let's just start the beginning of the ones that people really know very well. That is plain old Novocain. My listeners, most of them I'm sure have had dental anesthesia that had Novocain. As the expert that you are, is there anything that you would say just the general public explain of how Novocain works briefly and what's it's all about?

Dr. Isen:

So Novocain really is a misnomer. Novocain is an old type of local anesthetic. The newer local anesthetics that we use today are the Lidocaine, Articaine, Prilocaine. Those are the newer ones that have been around in the past 50 or so years. But Novocain is sort of a generic term that our patients used, the general public used to think about the drug that's injected into our mouth to numb the tissues. So this drug, this local anesthetic

drug, actually penetrates through the nerve and in doing so, it stops something called sodium and ion from coming into the nerve and when sodium cannot come in to the nerve, the nerve can't fight or can't send the message to the brain.

So if the nerve can't send the message to the brain, well then we don't know that something hurts, while we don't know that something is hot, or we don't know that something is cold because the nerve is blocked from sending a message. So the goal of Novocain is to block a nerve from sending a message; and in dentistry, we use that to our advantage to be able to do procedures that would otherwise be painful where if not for the injection of Novocain in the area that we're doing the operation.

Dr. Gould: Okay. Well, that sounds...

Dr. Gould:

Dr. Isen: Interestingly enough before Novocain, cocaine was used. The first local anesthetic or freezing solution to be injected into the mouth was powdered cocaine which was dissolved in boiling water. These dental pioneers in the late 1800s, 1880s, actually used cocaine because cocaine has the same chemical formula as Novocain. It works as a local anesthetic in the similar way.

Wow. Okay. There are so many comments that I want to make on that, but I think I'm going to hold back due to the appropriateness. There's so many silly jokes that we can make, but it is very interesting. Okay. So everyone is aware of the standard Novocain. Here, when I moved from Canada to US, I had to change a lot of the words that I used. In Canada, we would say, "I'm going to get you frozen or are you frozen?" and when I first came to California and I said that to my first patient, he looked to me and said, "No, no, I'm not cold at all, I'm fine." What funny is that the terminology is very, very different. In Canada, we call Novocain "freezing" which is interesting; but here, everyone still called it Novocain. That's the usual term.

Dr. Isen: Aside from the term, "I'll numb you up."

Dr. Gould: Numb you up, yeah. It's very different than saying freezing, but there you go, cultural differences. So aside from that, when you have somebody who's nervous, the next rung up on the ladder of anesthesia, would you consider that to be laughing gas, Nitrous Oxide, or would that sort of be the next step that you would use?

Dr. Isen: I would say before nitrous oxide, the next rung on the ladder would be probably an oral sedative, a single oral sedative.

Dr. Gould: Okay, so we'll talk about that. So when talking about an oral sedative, we're talking about the medications that are the anti-enzyme medications. Here, that would be known as Xanax.

Dr. Isen: Right.

Dr. Gould: Okay. Maybe if you want to sort of describe what you use typically and how you use it.

The oral sedatives, really, I like to call them anxiolytics because the purpose of giving somebody an oral drug shouldn't be to have him fall asleep. It's not really a safe way to use these drugs. They're not meant to give us a sleeping patient. They're meant to remove people's anxieties and lay some of their fears to make it easier for them to walk into the dental office or the dental operatory and get treatment done. But if they fall asleep, it's usually because they've been given too higher dose.

It's not really safe to treat somebody who's sleeping after an oral drug, unless the dentist who is using that modality is trained to manage people under deep sedation because there's a problem with people losing airway and not breathing properly when they're too deeply sedated from an oral drug. So the typical oral drugs, the oral anxiolytics that are used are... they're called Benzodiazepines, valium-typed drugs, and the most popular these days is one called Triazolam or Halcion. It's the trade and generic name. They're used to be a very common sleeping pill prescribed by physicians for patients. It's falling out of favor for people for sleeping disorders; but as an oral anxiolytic, it's a fantastic and very safe drug because it has some they called the short half-life which means it wears off very quickly.

So if we use this drug for our patients 45 minutes before they come into the dental office or the dental chair, then we know they're going to be pretty relaxed in three or four hours later; most of the effect of this drug should have worn off as opposed to something like Valium which might have a 20 to 30-hour half-life which lasts for a very long time; and for as long as that half-life lasts, that's how long we're responsible for the patient. So it's good to choose a drug that has a good anxiolytic effect, good in removing anxiety, and also one that doesn't really lasts for very long.

Okay. One of the instructions of course that we give to our patients is they absolutely cannot drive. So if we're going to be giving a sedation medication, it's very important that they do not get in their car and come to the office and certainly when they're done with the procedure, we don't want them getting in their car and driving home.

Right, usually offices that do this on a routine basis have a list of instructions before the procedure and instructions after the procedure. The instructions before the procedure usually include not driving and making sure that you have a ride with you. Some people even recommend that you have an empty stomach from solids for six hours and pure liquid for two hours just in case by mistake somebody is sensitive to the sedative effect, they fall asleep by mistake, and they vomit. So it's all safer to have an empty stomach just in case we get too deep of the sedation because it's unpredictable. We'll get somebody in oral drug we never know how deeply sedated they're going to get.

Sure. Okay. The one thing that one of my patients asked when they take that medication is is it going to hurt like is this like a pain relief, how am I going to feel if I take this drug;

Dr. Isen:

Dr. Isen:

Dr. Gould:

Dr. Gould:

and, the sad thing, it's actually kind of funny, well, the procedure itself, if we give you good Novocain, it shouldn't hurt but the idea if it actually hurts, you really just won't care. It kind of takes the edge off of the general anxiety that people feel coming to the dentist. I really love to use this medication on people who are nervous. I think it works great.

Dr. Isen: That is so great. Yeah, that's fun.

Dr. Gould: Okay. So we're going to take a short commercial break here to let our sponsors be able

to get their message across, and we'll be right back.

All right and we're back. Dr. Isen, are you still with us up in Canada?

Dr. Isen: I'm still here. I haven't run away yet.

Dr. Gould: Okay, good. All right, so that's going to bring us to the next type of sedation in dentistry,

and that is what people know as laughing gas or Nitrous Oxide.

Dr. Isen: Right.

Dr. Gould: The funny thing that I remember from dental school is as we take this different

pharmacology lectures, and they tell us what the mechanism of action is for all the different drugs, I'll never forget looking to page in the pharmacology book and getting to Nitrous Oxide, and it says mechanism of action-unknown, and I love that because, great, let somebody inhale as much gas and we really don't know how and why it works. Now that was almost 25 bucks; that was almost 30 years ago. So what can you tell us about

Nitrous Oxide and do we know how it works now?

Dr. Isen: You've got a great memory from dental school; I can't remember anything. That's

impressive. It still holds true. Nitrous Oxide, we don't really know how the anxiolytic sedative effective Nitrous Oxide works, but it's a fascinating drug. Arguably, maybe the longest drug in medicine. It's been around since the mid-1840s and even arguably the safest drug in medicine because we don't metabolize Nitrous Oxide. What we breathe in is what we breathe out, and there's no such thing as a Nitrous Oxide allergy. So, for those two reasons, unless somebody abuses it, doing harm with Nitrous Oxide is really

unheard of it so it's a fantastic when used properly.

Dr. Gould: Is this something that you use on a regular basis with your patients?

Dr. Isen: I used Nitrous Oxide routinely because I prefer Nitrous Oxide over an oral anxiolytic

because of the control it gives me unlike oral drugs. With Nitrous Oxide, we can titrate.

We can go to the exact level that a patient requires, keep going until they're

comfortable; and if it's a little bit too much, we lessen the dose; if it's not enough, we increase the dose unlike the oral anxiolytic where it's a one-shot deal. You give it, cross your fingers and hope for the best. So, Nitrous Oxide does give us the most control

amount of downside with it. Not everybody really likes the feeling of the nasal hood. Some people feel a little bit claustrophobic and also people don't always like the feeling; the feeling of being stoned isn't really pleasurable for everybody, so some people would rather not have it.

Dr. Gould:

Okay, interesting. It was funny that practice in two different countries in many different offices and there's a really huge variety of how this medication is used. We don't use it routinely at all in any of my offices. It's funny because the areas that I practice in, it's not requested very often. And to me, I don't love it because I'm not used to, on a regular basis, working on people's mouths because they've got the big nasal cover there and to me, it gets in my way because I like to work from behind the patient but on special request, we know we do it. Just so you know not that often, it's not something that is common in this area, interesting. All right.

Dr. Isen:

On the downside, it's not just bad with what you said but it also takes some time. I mean there's a set up involved, there's equipment involved and it takes time to titrate and then it takes some time to lessen the dose and take people off of it. So it's not as fast as an oral drug and then there's time involved.

Dr. Gould:

Okay, yeah, and there's one other issue I've had had is that oftentimes the patient can have the bad experience. So that's one of the reasons why I don't always love it especially for the extra nervous patients because they are the ones who tend to sometimes just have a very strange reaction and they have memories of things that maybe more worse than actually happened. What will fall that one away for people, for you is to use it; for occasional person for me. Okay, so that's going to bring us onto the sort of more serious type of sedation. What can you tell me about for the next level up, you got somebody that says, "Listen, I don't care what you're going to do to me. I just can't face coming to the dentist's office and there's nothing that you can do to make me happy. Put me out." So what can you tell us about that?

Dr. Isen:

So we got about 15% of the population who are documented as being phobic enough with respect to their dental visit that seems like oral anxiolytics or Nitrous Oxide just won't be enough. They're just too afraid, too scared, and any awareness isn't going to allow them to sit through the dental appointment. So then you have to get into their veins and intravenously administer drug to the point where they are sedated and then there are different levels of sedation: conscious, deep, and general anesthesia which are now called minimal, moderate, and deep general anesthesia. That would be the next step after Nitrous Oxide.

Dr. Gould:

Okay. I don't know. Do you perform all of those types of sedations in your practice?

Dr. Isen:

Yeah. In our practice, we have all of those services available. For general anesthesia, it's something we sort of plan out in advance to something we do usually every other Wednesday for example and a separate anesthetist would administer the anesthesia.

This is a different dentist who is trained to do general anesthesia and then myself or my partner would do the dentistry. We feel that if you're doing general anesthesia, it's good to have one person doing the anesthesia and another person doing the dentistry. But that's not always the case. In a lot of cases, the dentist can act as both the anesthetist and the operator.

Dr. Gould:

Okay. When you have someone like that in your office who's doing that, you also have to have like a registered nurse or a special type of crash cart or do you actually have a facility that is set up in your office that set up for general anesthetics?

Dr. Isen:

Right, when to start getting into any type of sedation, whether it'd be oral anxiolytics, Nitrous Oxide, IV sedation or general anesthesia, the state that you're practicing in or the province that you're practicing in will have a set of guidelines. They'll be state mandated guidelines. The State American guidelines are based on an ADA document, and this ADA document is the sort of general guidelines and most states follow it. But other states are more strict; some are a little bit more lenient. These guidelines contain the rules that people must follow, practitioners must follow, and those rules speak to the staff that must be in the room. It speaks to the emergency drug that must be present, the emergency equipment that must be present, the amount of training that's required to administer the anesthesia, the amount of continuing education that is required, all the things that go into being certified to do what one does. These guidelines speak to those rules, and they're different everywhere.

Dr. Gould:

Okay. Now, the difference between your general anesthetic and then your much lighter sedation, do you get to make that choice or do your patients dictate that?

Dr. Isen:

I try and guide my patients when I meet them and I see what their dental needs are and speak to them about their past dental history, what their experiences have been in other dental environments and knowing what their dental needs are, I recommend a type or a level of sedation to them and explain to them why I'm recommending that level and then I listen to them and they tell me ultimately what they want. I find that the more control, anxious people have, the better they do even though they sometimes don't want the control because they're so scared. Really sometimes part of the reason they're scared is because of the lack of control, so I try and get people as much choice as possible in order to choose the modality of sedation that they will receive with some guidance from me.

Dr. Gould:

Very good. Okay, I like it. Now, this is a question that I would struggle with because now, you do use procedures for people and I know that even the best dentists in the world will have patients to come back with something that's not right, something that needs to be adjusted. How do you deal with this people who had sedation and coming in and need you to go in there and maybe smooth something with the drill, do they have to be sedated just to have a minor adjustments?

Dr. Isen: Yeah, it's a real issue. So we have people in our practice who even for their hygiene visit

have to be sleep. They won't even get their teeth cleaned without an intravenous anesthetic, so you have to provide adjustments and even for assessing the occlusion during the procedure, assessing during the procedure when people are asleep, it's

pretty tricky.

Dr. Gould: Yeah.

Dr. Isen: So it's not uncommon that people have to come back and sometimes we use laughing

gas to get them over that or sometimes they're just going to bear it until they have to

come back for another sedation and then we do the adjustments.

Dr. Gould: Wow, okay. That's so interesting. What sort of pause there and say you're talking about

all the different medications and everything, it brings me back in the old days where you and I work together teaching CPR. We actually had a question from one of our listeners, who let Maria know that they wanted to know what it's like for us talking after all these years and going to dental school. It's really fascinating and I still can't believe that it was

in 1991 that we graduated, so I met you in 1987.

Dr. Isen: Yeah.

Dr. Gould: The funniest thing for me is that you and I, we were really just best friends in dental

school, or I thought we were, unless you're better friends with somebody else. But to

me, the years just completely disappeared every time I talk to you, really absolutely.

Dr. Isen: We were brothers in dental school and kept in touch for a long time. I feel the same way

when we speak. It's as though it was just back in 1987.

Dr. Gould: Right. Well, I don't know about you, but it was a couple of years ago, I had a really

horrible dream, nightmare. It was probably my sleep apnea. It was probably when I stopped breathing for a while, and I had a dream that I was going into an exam and it was occlusion and occlusion is the study of how teeth come together, and it was one of my most dreaded subjects and there was a book, I think it was Occlusion, the Fundamentals of Occlusion. My dream was I showed up to the exam, and I said, "Oh, my

god, I never read this book." I have absolutely no idea of what is the funniest thing could

I have. I believe I woke up. I am pretty sure that I read that book. I just maybe don't

remember at all. So do you think it will happen? Okay.

All right, thank you so much for coming on my show and also thank you. You really helped me out when sometimes my guest cancelled at short notice, I knew that I could count on you to come through especially it's later back east and you would be busy with your kids and everything, but I really appreciate you. We didn't even really talk about all your speaking engagements and that, and maybe we'll have an opportunity to get you back on the show and talk about some other things because after 25 years in dentistry, I

know how much I know and I know that you know a heck of a lot of stuff and I think that some of the stuff that you are aware of would be interesting for our listeners another time. So thank you very much.

Dr. Isen: Thank you. Thank you very much for having me on. I love what you're doing with all the

Vitamin D issues. I think it's all great stuff, and I wish you luck with everything. It was an

honor to be on your program.

Dr. Gould: Okay, great. Thank you so much. You have a good night now.

Dr. Isen: Thank you. You too.

Dr. Gould: All right. Bye.

Okay, everybody. This was a departure from how I excited am again about the Vitamin D, sleep apnea stuff and there's more of that to come. Don't you worry. I thought it was a nice departure, and I know there are so many people out there who really are nervous about going to the dentist. This is important for me to let you all know that we do a lot of these sedation procedures at Modern American Dentistry at my three locations. We don't specialize it but we have done a lot of these procedures. So if you are fearful, and if you've been avoiding going to the dentist for a long time, things have changed a lot.

Starting right from the beginning, just the way dentist practice now, the way we give Novocain, and how we treat our patients, it's a lot more humane and maybe some bad experience you had as a child and don't be afraid. Don't put it off. The sooner you go in and see a dentist, the easier it's going to be to fix whatever you have going on. You know that wellness is all about prevention and taking care of something before it begins to be a major issue is always a smarter idea. It's less expensive. It's less time to share and it's less pain.

All right, so before we end the show, I just want to help to promote what's going on tomorrow. This is October. October is domestic violence awareness month, and I'm very honored to be speaking downtown in Los Angeles at the venue of L.A. Live where I will be speaking on at the same podium where the mayor will be and looking forward to that. I'll be speaking about my work with the women of Safe Passage and how domestic violence doesn't have to keep somebody down and if we can get somebody who's been through a lot, happy, comfortable and smiling, you could change their life to be able to get out there and get a new job and reestablish their life.

So tomorrow, anybody who's in the downtown LA area, I'll be in the Los Angeles area tomorrow, I would love it if you come out to support me and the women of Safe Passage, and I think it's going to be a really great event and look forward on my website and some blog posts and some of the video. Tonight, I'm going to go home and practice my speech. That's it for today. Thank you so much for joining me for Get Your Smile On.

|  | I want to thank my incredible producer, Maria DiGiovanni. You're t<br>week, Get Your Smile On, and we'll see you soon. |
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|  | the best. Until next   |