Introduction and Guest Background

Hello, it's Doctor Kent Holter for another episode of the Peptide Summit. Today we welcome Doctor Christopher Wakely, and he's speaking about seeker to fatigue, brain fog, insomnia, mood disorders and chronic pain.

So excited to hear about how to solve those problems. And so many patients are suffering, and doctors just can't put it together. So looking forward to this hour.

And I wanna say thank you so much to Christopher for being on. Appreciate how your your busy up there in Washington. Any riots or anything going on up there?

Not not in my little neighborhood, but, yeah, Seattle's a little bit of a mess. Yeah. It's like, well, you other news, we always see the the worst, right?

Yeah. But yeah, just a little bit about. Christopher is born and raised in Maine. Which I think, man, that must be cold, but, and then he moved to Washington, where he pursued a doctorate in natural medicine from the university.

He practice, is dedicated to helping patients with complex chronic illness. We've been seeing between 11 and 17 physicians, and that's when we published our results.

We had 7.2 physicians before seeing us, and that just gotten more and more. So that 11 to 17, I think is right on. Especially, you know, vector borne illness, including Lyme, but Bishop, Bartonella and the list keeps going, you know, basic keeps being added pain and environmental medicine, autism.

I love to hear, things about, your experience with with autism. Of course, that's just skyrocketing. There's a wide variety of tools, including homeopathic antigen therapies, drainage injections, herbs, peptides, Aids, and pharmaceutical and pharmaceuticals.

He's a member of a, Arkham International Peptide society in his spare time. What little there is. He enjoys spending time with his wife and two daughters.

Strength training. Reading and watching the Boston Red Sox. So go, Sox. Awesome. But, yeah, I think the World Series is on. Was it game three or something?

Yeah. But. Yeah. Tell me, how did you kind of get into, you know, treating these sick of the sick, these patients that no one can figure out? Yeah. Well, I, you know, in past year, when you're going through natural Patrick Medical School, you you don't you see some complex patients, but you don't see a lot.

And in my, preceptorship, which is like an apprenticeship that you do, you know, I worked in Doctor Clean Hearts clinic with doctor Katie Dahlgren and Doctor Michelle Grind staff, who I work with now.

And man, they were seeing some really sick patients and they were using tools that I had never heard of, back then. So I think for me, it's kind of like going to a different plane in medicine and you start to see that, hey, it's not as simple as just giving somebody a B12 shot or glutathione or.

Yeah, they, you know, diet's not going to fix these people. They've already tried that. They did that 20 years ago. So I think the, the curiosity in me and kind of that endeavor to always be learning more is really what got me into treating patients with complex chronic illness.

Yeah. Do you regret it? No. No, because I it's challenging, you know? I mean, you do it, too, and it's, It's not easy. But, it's not boring. You know, I never go home and say. Yeah, today was boring.

It's true. And you, you know, because or especially more and more, it's like, okay, you know, one cause, one illness, one treatment, you know, and that whole paradigm is, is falling apart.

Yeah. I wish yeah. And with standard medicine, the patient is in a box and they get this. And if they're outside the box, the veteran just kind of gives up.

Right. Yeah. For just a referral between specialties. Yeah. It's just the psych referral. And they don't believe and I'm sure we had, you know, so many patients like cry the first visit and she said, you believe me?

Of course, you know. And we'll show you on paper that you have all these problems.

Approach to Complex Chronic Illness

And the doctor says nothing's wrong with me. You know, when you don't do the right test, that's what you're going to find, right? But when when you see these patients, what are some of the first things you think of?

Well, I, you know, because I'm a because I'm a naturopathy physician, my approach is a little bit different. The first thing that I'm always looking for is how are their organs of elimination working?

Because they'll come in and they'll tell you. Right. And I always I always say to patients, you're coming to me with a full bucket and a clogged spigot.

So if you've got stuff coming in your bucket, whether it's aluminum or gluten or stress in the home or whatever, and your spigots clogged, then you're just going to keep spilling over and making a mess on the floor.

And those are the symptoms that they're coming in and talking about, right? Oh, I have headaches. I've got pain, I've got gut stuff. So I'm looking at the spigot first.

First thing. And you know, the spigot is the liver, the kidneys, the gut, the brain. Are these things able to, detoxify in a sense? So I'll start there.

I'm always looking at immune system because that's a huge, huge thing, especially when you're dealing with patients who have complex chronic illness. I mean, if it was just as simple as treating somebody Borrelia, which, you know, even standard care, I mean, you got to have them on antibiotics for like three years, and then you've got persistent cells and yeah, it doesn't even work.

Look at the relapse rate. What, you know, 2 or 3 weeks of docs a and you drive it into the tissues and it it's like 80% come back and those are ones that they're even documented.

But they come back gradually as, oh, I got migraines. Now I got quite a great syndrome. I've got M. S., you know, and then never they go, oh, you have Lyme or even like, you know, Michael J.

Fox and you know, right. Parkinson's and we call that so, so many people did. And so if you check for Lyme like, oh yeah, he had it and cured it, you know, and it's like, oh, you know, and you know his doctor saying, oh that's crazy.

You know. Right. Well the so that should tell a physician if they're, if they're thinking that should tell them that they need to look at how the immune system is functioning.

All of our patients come in. Most of them are too dominant or they've completely lost tolerance to things that are like, sort of normal. How many people have Epstein-Barr?

How many people have HHV six antibodies? Right. It's not an Aids defining condition. So is it even really an infection? That's when you need to be looking at the immune system, trying to force a balance and hopefully initiate some tolerance in those cells so that you can kind of live in the world and breathe air.

Yeah. When you have, you know, five, six, seven infections was the problem that you just had to get all those infections. Yeah. No. You know, or it's like, you know, I'm sure you've seen the patients that come in with 22 separate diagnoses, right.

Like what? Okay. What you are the most unlucky person or there's some common thing going on and what test you like to do to assess the immune system. Well, you know, we're always looking at bloodwork.

So we're always looking at CBC, CMP. I run a natural killer cell assay on just about all of my patients. I think that's really important. And you do, quest lab core.

Outside, usually lab core. I mean, will, you know, will write labs for quest if that's what is close to the patient or that's what their insurance covers.

But typically I like to use lab core, especially for that natural killer cell activity test because it's kind of finicky. You know, they have to send it out to a rep and it's going to be done Monday through Thursday.

And, you know, that's the biggest problem. And just like it's it's disheartening. I gotta tell you, just a real quick story. We sent our, media guy, just standard labs.

There's lab core in a class right on top of each other. He went and did like, you know, basically CBC, chem panel, insulin, hemoglobin A1, C, class lab, which was on top of whatever didn't eat in between one.

He was diabetic. The other one is A1. C was 5.2. Yeah. And so and that's what unreliable that and that's a basic test. And so you get these more complex tests and people hang there.

Had any one test. It's like I like to do a lot of tests and paint a picture. But yeah you can't. Well this test is negative. So oh forget that now and yeah.

And then the tests are you know they might be very specific in general if you're positive you're very likely positive but you're negative. It doesn't mean much.

But I think, you know, even just running a even just running a CBC, if you're looking at the ratio of neutrophils to lymphocytes, you know, it should be like 6030.

Right. And if somebody comes in with a with a neutrophil level of 74 or they're flip flopped and they're lymphocytes or 60% or something like that, well then you know probably something viral is going on.

Or you know if the neutrophils are high probably something bacterial is going on. A platelet count can tell you a lot about their coagulation status. And you know, like I, I guess I'm agreeing with you and saying that.

Yeah it's nice to have a lot of tests. But in the end your patient's either going to be spending money on tests. Are they going to be spending money on treatment if they've got all these chronic, complex issues?

I would rather treat empiric early and just kind of march about the process and use as limited, limited lab work as possible. I do, and I, I agree with you and but with a caveat.

And one is I totally agree, is that, you know, most doctors especially that, oh, everything's normal, right. But you look at, hey, you're the lowest 2.5% look at this ratio, right.

Glean a lot of information from the basic tests. And but in some patients I'll do very little tests but depends on the patient. Like a lot of times I feel I have to convince the patient that they have something going on.

And because if you don't, then they go back and they go, okay, I'll take the treatment. Their doctor says, oh, that's ridiculous. You know, have that.

Their family members say that. So sometimes I over test, you know, I know what the tests can come out are very like do a little defensive medicine too.

But also so they're have bought into it, you know. Yeah. I think it's great medicine and there's medicine. Yeah. We, you know, we always look at thyroid.

I always run a heavy metal profile. Lab core has that test. It's heavy metal profile, too, that looks for mercury, lead, arsenic and cadmium. That's been really, really useful.

And so that's a serum test. Yeah. And or maybe plasma, I don't know. Yeah. So is health sensitive. You found that because, you know, generally that's pretty damn high for those to come up.

Yeah. Well you know, it's interesting I had these patients who live on the western seaboard, you know, the Gulf side of Florida, and they live really close to a golf course.

And their arsenic levels always come back elevated, and their cadmium levels are high, too. And, you know, they're using a ton of fertilizers that have a lot of those metals in there.

And that's been pretty consistent. I would say there's a lot of times where I'll get blood that levels back that are, you know, somewhere between 2 and 8, which, you know, that's not 40, but still, I mean, something I mean, you get a blood that level of two and you know that you're going to be hanging on to, you know, 40% of that, it's going to go to the bones or the brain or the liver.

Over time, that's going to become an issue. Yeah. And that's not where it is. And you're finding all that, right? Yeah. Yeah. That's that's huge. And we will find Mercury.

You know, sometimes in people eating sushi and, but, yeah, it, it is it, it's like you could spend all your money on tests or, or and so many things are so common.

You know, how many people have no heavy metal issue, you know. Yeah. I mean, I haven't seen any patient. Yeah. Really? That doesn't have it doesn't have something.

And then you've got the forest fires that, you know, we're going on in California and blowing all over the country. Those pine trees and everything else are bio accumulating metals and toxins to California.

You can't have a wood burning fireplace. You can have thousands of acres go up, you know. Right. It's one of those. And two, I could expect the heavy metals.

Testing, Detox, and Immune Modulation

You know, the patients with not enough cellular energy, they need the solar energy to kick that, that heavy metal out of the cell. And if they don't, it's all sitting, you know, in the in the cells.

So like everything vicious cycle. You know and like autistic kids you look at their urine is low because they're not excreting it. They're not excreted. Right.

They're just they're going to accumulate it, hang on to it. Their mitochondria aren't working. So yeah it's a it's an issue. Yeah. Vicious cycle. And and so you mentioned when we really talked about kind of that complex patient, the pathogenic Pi.

Oh yeah. Yeah. Pathogenic pi. Well, you know, I think we all if we see patients with chronic complex illness, we all kind of either develop our own little thing around this or hear somebody else talk about it, but, Yeah. Pathogenic pi.

So somebody comes in and they've got this profile of toxicity. And like we said earlier, it's not just one thing. One thing may be primary. Like maybe they have Borrelia or maybe they have elevated Epstein-Barr, or maybe they

have heavy metals.

But what ends up happening, and I think the reason why so many people go to so many doctors is that they're not thinking about this. They're not thinking about the interplay between these different pieces of the pie.

And when you treat one piece of the pie, like if you put somebody on spore, an ox, an anti whatever antifungal and stand, it doesn't even matter. Even oregano oil.

Well, those fungal species bio accumulate heavy metals and they're biofilm. So when they die off, not only are you going to be dealing with, you know, an antigenic problem from dead fungal species or Mike mold or whatever it is, but now you've also liberated heavy metals in the blood.

So one thing that I try to do in my practice is make sure that if we're treating one thing, we're kind of looking for 4 or 5, six steps ahead to make sure that we're accounting for the interplay between toxicity or toxins.

Yeah. Because, you know, everything's connected, right? Totally. And and in standard medicine, it's like, oh, well, you don't do that part. You said that over there.

You said that over there. And that just doesn't work. Now, you know, and, you know, you have to think about all of them. And there is there's so many different areas, you know, you think about, you know, how mitochondria is function, you know, from the infection, from the inflammation, from the immune dysfunction.

You get a little hormones, which causes the mitochondria be worse, which then you get hyper ability from the infection. Now that the organism is hiding under that, you get, you know, gut gut issues, which thing?

You know, it just it is it's just everything's a vicious cycle. So it's kind of a where do you, how do you decide where to start? Well, you know, you start, you start with the organs of elimination, the trees you start with, with building or modulating their immune system.

And then you start trying to peel back layers of this kind of pathogenic pi and to go back to, so when you say you look at detox, what are like your favorite things?

Yeah, that's a good question for for detox. Yeah. So there's a lot of different drainage remedies that you can use. Some of them are energetic, you know, homeopathic drainage remedies like the numbers I found to be really useful.

They're a little complex to get into because there's like 78 of them. But, if you if you learn them and you figure out that, you know, when you, when you put under one and under 243 together, patients have, they don't have liver pain anymore.

Right. Or you give them, you know, some other number and then their urinary excretion starts to increase. So I think homeopathic drainage remedies can be really helpful.

But it just made me think that like for you to treat this one section, what you had to learn to do that and you were willing to do that, you know, and learn.

It's very common. 78 things to treat this one section. But knowing how to do everything else, you know. So you wonder why not many doctors go, you know, going well because it's not taught.

I mean, it's not even taught in natural Catholic medical schools. You know, you've got to go get additional training when you bump up against patients that are really complex.

And you, you know, you don't switch specialties, then, you know, you know, you you got to get after it. Herbs can be really helpful to like greater salendine Caledonian for the liver can be really helpful.

Juniper you know the berry that they used to make gin. That's an herb that can. That's a great thing to help open the kidney among tree. Right. I'll change your bucket of gin.

There you go. Yeah. Get on, get on the gin. So herbs and homeopathic bioenergetics remedies are what I'm kind of using to get the trees working. I do a lot of neural therapy, so using, like, 1% prochain and specific patterns over different organs to treat the autonomic nervous system.

Get those sodium potassium ATPase pumps working. That has been really, really helpful. You know, it's an injection, so it's a little invasive. But in most patients when you do that, I'm just very interested in the autonomic nervous systems.

It you know, it's a major issue. And what do you do to kind of diagnose that. And what do you see when you do that treatment? Well, to there's a couple different things that you can do to diagnose it.

Obviously you can look at labs, you know, if you're taking a good history, they're going to tell you what's going on. You know, they're going to tell you, hey, you know, my urine stings all the time.

I've had a history of bladder infections or. Yeah, I had to have my gallbladder removed. My digestion is really slow. My stool is green. So then you can say, okay, well, I'm going to do, I'm going to use neural therapy over, over the liver.

The other thing you can do is if you're trained in muscle testing or autonomic response testing or something like that, even though that's controversial.

So that can be helpful. And it's helpful in my practice. So that's what I do. I you have to say, when I went up to see a neutral patient with clean heart.

And I'll try to be very brief, but I had when I had bad line and I was, you know, basically dying, but I had periodically and inflammation, just terrible pain in my pride glands and spasms go into the engine.

He goes, yeah, it's inflamed. In fact, you couldn't see it. But you know, take antibiotics. I'm like, oh, I'm on seven I. V. antibiotics, you know, and then I happen to go to clean heart with a mutual patient and I'm like, hey, you know, I didn't we didn't go up there for treatment, but I'm like, he's like, hey, let's see what's wrong with you.

You quiz him? You know, I'm like, I'm going to see if you know, but I didn't expect you to pull that. And he goes, you got prodded gland inflammation.

I'm like, shut the heck up. I and that's, it wasn't in my chart. You know, I think if you even look at my chart and I'm sure he didn't check that out, like, hey, you can argue with that, you know.

Yeah, it's definitely a good tool. I mean, you've got a couple it with science and a good history and good physical exam and good live laboratory studies, but I think it can be helpful.

Yeah, it's another tool. And, I think some people are really good at it, like himself. Some people maybe abuse it a little bit and, are not that good.

Well yeah, it's I, I've seen it. And it also when they come and say, oh we think the patient is this, is this more times and not the labs like damn what they said the infections were they.

Yeah. Yeah. Yeah. Well you can bias it you know. And when I do when I use art to test patients, I try and blind myself as much as possible to it. And, the other thing that I think, and maybe this is just me, but, you know, I think if you're not being honest with with yourself or with your patients, your patients aren't going to get better.

Right? And then they're going to bounce, they're going to move on. They're going to go, they're going to go find somebody else. So if you're really trying to serve the patient, you're going to do a good job regardless of what tool

you're using to diagnose it.

You're not there to prove that it works or not. You know you're there to get them better, right? Right. Yeah. So, and so in terms of. Yes. So detox and then, we'll second thing you were saying, yeah, we were talking about we're talking about immune system and so immune system.

And so what do you like to do for the immune system? There's so many things, you know. Yeah. Well, you know, the question I was talking about natural, natural killer cell activity.

I use quite a bit of mushrooms in my practice. So, like turkey tail, Ghana derma, lion's mane, things like that. Turkey tail has been shown to increase natural killer cell activity.

I think that's a really big deal. It's pretty well tolerated. It's kind of. It's turkey tail. It's, like. Yeah, it's it's so good. I take it, you know, my kids take it.

Especially around this time as we're getting studying the lion's mane. It's incredible. Yeah, it's a big deal. It's a really big deal. You get to treat the gut when you're looking at the immune system.

I mean, yeah, that's of our our immune systems in our gut. So is that when you start introducing peptides. So peptides are definitely a piece I think BPC 157 is I mean it's definitely in my top three things to use for treating, the GI.

I like it when it's with Tb4 too, just because, you know, you're healing. You're healing those leaky junctions in the gut. You're healing those leaky junctions that are in the brain.

Yeah. Leaky gut equals leaky brain. Totally. I think LDA and LDI can be really helpful, too. If you're working with immune system and people have a failure of tolerance, they can tolerate pain.

What with what those are what, LDA, you know. Yeah. So the the theory behind LDA and LDA is that you, you end up in this vicious cycle of, something that comes into your system, an antigen, a protein, whatever you want to call it.

You know, I that's what I say to my patients. So it doesn't matter what you call it. It's a protein. It's antigen, it's stuff, whatever it is. And that, you know, goes to the dendritic cells, the dendritic cells in your immune system.

See that. And they say, hey, yo, you know you're not supposed to be here. We're going to go down to the lymph nodes and let those naive T cells know, right.

Which turned into effector cells. And then you start developing immune cells against these antigens. And then you end up with tons of d granulation, tons of histamine.

And what does that do? Well, that creates more inflammation. Right. So there's your there's your cycle right there where LDA and LDA come in. Is if you can kind of retrain those naive T cells to behave a little more appropriately to these things that are normal, right.

Normal ish. I mean, everybody's got strep in them. A lot of people have Epstein-Barr and have no symptoms at all. So if it's really not an infection and you can teach the immune system how to become tolerant to it, then you're going to reduce inflammation.

You're going to get out of that huge shift and people are going to feel better. I mean, it's been a huge game changer for me personally. It's been a huge game changer for my wife to I think it's nice and I don't my sense is, if I had to guess how many people worked and, all comers, 50, 60% of patients get 50 to 70% better, I would say.

And that's my guess. What what what's your sense? And it's just one little shot or two little shots. Yeah. So inhalants and foods right. Yeah. So yeah I would say the majority of patients get better.

The time frame is what kind of irritates me inside. You know, because I'm a guy who, you know, I want my patients to be better yesterday. Right. And I always say retraining the immune system is like training a three year old to pick up their stuff.

You know, it's going to take a really long time to get those T cells to a place where they can be tolerant to things for for a long time. And one of the other problems is you can upset that tolerance.

You know, if you get a chronic viral or a, an acute virus, a lot of times that can undo that treatment and you have to get a booster. So usually what I tell patients is you're this is probably going to help you.

But I want you to give it a year before you're willing to say, I'm not going to do it anymore, or this therapy sucks. Now, most people get better way before that.

But me, for example, it took me 18 months to get over my, environmental allergies. You know, my my hay fever, the grasses, the dogs, the trees, the bushes, the shrubs.

Autism, Infections, and Peptide Therapies

Yeah. I'll just stick it out and, But the thing is, it's not incredibly expensive. It's not, it's once every seven weeks. Yeah. So. And it's just so tiny.

Yeah. In fact, I brought some. I went to a conference, a couple weeks ago, and one of the docs they hadn't done, and I said I was bringing some of my bag.

Yeah. Okay. Yeah. It's been really helpful from strep, especially in kids, you know, because you can do it. Sublingual. You just give them a squirt. And I have had scores and scores of parents tell me, wow, that strep remedy that really helped with their agitation with so that for kind of general kids.

Or is this like the pandas kids and pans. Yeah. I mean most of the I yeah. I don't do any well child exam it's come on. Fortunately. Yeah. Yeah. So the kids that I see are usually pandas parents somewhere, somewhere on the spectrum.

But it can also be good for, you know, patients who. Oh, yeah. I have strep throat twice a year. My tonsils are a hot mess. Yeah, that's what I wanted to talk about.

I haven't seen someone use it for that. That's what I was wondering. Yes. A lot of autism. Tell me about your experience with autism. What are some things you found, helpful?

And let's say there, you know, so many parents and they, you know, the standard what you do for your autistic kid is terrible, barbaric. And, like, when they come in, what what types of things, do you generally do?

And what you generally see and tell them what to expect? Yeah. Yeah. That's boy, that's a that's a good question. And it's, you know, it's obviously going to be different in every kid.

I'm always looking at the gut, you know, because usually they're got some mess. A lot of times we will put them on either keto often you know that old school anti allergic.

You know, because usually there's a little bit of a mast cell piece which is just another symptom of, of something bigger. And one of the biggest things that we've seen to be helpful is, you know, treating infections.

So and that's hard to diagnose. Right. Because the little kids, they don't like to get their blood drawn. And we'll do an oat test on them, an organic acid urine test on them.

We'll usually do a stool test. I like the GI map right now. I mean no stool test is perfect, but I think that one's pretty good. You know, we're we're checking for things like parasites, candied, different neurotransmitter issues.

But but really infection. And, you know, when you start treating the infections, they'll, they'll sometimes get a little bit worse, you know, you know, a little bit worse before they get better.

But once you get that low down and you can use a whole bunch of different things to, to treat them, I mean, you can use herbs, you can use peptides, you can use tonight resolve or albendazole or belts or side.

Not really so much antibiotics. I don't use a lot of antibiotics, but yeah. How young do you treat my youngest patient right now, I think he's going to turn four in a couple months.

And, do you like stem cells? Exosomes? You know, I do, but I don't have any experience with it. Yeah, just theoretical experience. So unfortunately, I can't speak to that.

But I've heard great things about it. I think, from what I have seen now, this isn't just my, you know, my own personal bias. Sometimes I feel that patients while parents will take their kids to get stem cells too soon and it can flare them.

And to me, that means that there's some sort of infection there, latent infection that hasn't been treated. And, you know, they get a they get a they get a flare.

And I've had a couple patients say, yeah, my kids was way worse after that. Yeah. And that's the last thing I want to do. And yeah. And it's like looking at their labs.

I was when I first started training autistic kids, it was just kind of like start out with a of Lyme parents say, hey, can you give me just a kid like, oh, okay.

Let's say like, damn, these labs look just like your labs, you know? Right. And they got that immune dysfunction and and I think, yeah, a couple things really were I love exosomes and the stem cells in those kids.

But we're really started with peptides first. You know C like C max B TV for BPC for Towson. Like, which is like the bonding hormone. Love that got of course, you know, huge in their gut.

They have, yeah. Let's see what else we've had. And it's just, I think even more satisfying, like treating a line patient, getting a better satisfying.

But, you know, autistic kid gets so much better. It's like, you know, that's a feel good thing. It's like, wow. You know, because it's affects so many people's lives.

Not only the the kid but the families. And it is so stressful. Yeah. Well, I couldn't imagine. I mean, you know, you've got a, you've got a kid that you, you want to get better so that they can live a healthy, healthy and happy life.

And, you know, even above that, as a parent myself, you know, I'd be worried, like, I'm going to die someday, you know? So I'd love to get you to a place where you could be normal, typical.

And you know, kind of kind of function on your own. Yeah. And I mentioned our previous ones, and I was a, you say, but, one of our, patients, but our kids could not touch them and that close to them F-bombs, you know, we bring them in beforehand, send videos and playing basketball, which is that, you know, just looking forward the basketball going by and after, I'm sure.

How long. But maybe six months. We started seeing big improvements. Like nasal exosomes. Peptides. Yeah. Gut stuff on T32, three works great on those kids.

Of course all growth hormone is great. They're almost all low growth and have hypothalamic pituitary dysfunction. He now comes in and says kind of he gives his own shot.

He jokes he's sarcastic. Yeah. That's it's playing basketball gymnastics. And it just like a you can't believe the same

thing right. Yeah. It's amazing.

I feel like they're harder to treat. These kids are harder to treat than what they were. I mean, I wasn't practicing medicine 20 years ago, so. But from what I have heard from other doctors who do a lot of autism, one of my colleagues, Doctor Dirksen, her and I, you know, work and I work in her clinic.

She's she's treated autistic kids for a long time. And she said, yeah, it's it's more complex now than it used to be. You know, we used to put them on a little bit of.

Yeah, B12 and a probiotic EQ and you know, they would get better. And now it's much more complicated like that. I think they're being poisoned even more and more.

And one thing, I couldn't believe them, you know, looking at these studies and so many studies are pointing to Tylenol maybe being the number one cause of autism.

Like, why isn't this all over the news? And they're handing out Tylenol like, crazy, like, don't give Advil, get Tylenol. It's, it's nuts. And and of course, the whole vaccination controversy become crazy anti-vax.

I'm not into that. But, you know, why are we giving kids hepatitis B vaccines, right? When they're born? What are they going to start going into prostitution and do what I b drugs?

I mean, it's crazy. Well, when you look at the immune system of a kid, I mean, the immune system doesn't really fully 100% develop until they're about seven years old. So I don't know, I think it's a little nuts, but, and it really it really depends on also, you know, the mother stress level, which then and, and we're, started a kind of a vaccine risk mitigation looking at the kids immune system.

And if their immune system's way off, they're much more likely to vaccine damage. And then you look at your what, you know, a huge risk factor for autism that is not controversial.

Maternal infection. Right, right. And so the baby now has the same immune response because all those, you know, same cytokines are in there. But so the response is very strange when you say, well, see, that's why they need to get a vaccine.

Well, wait a minute. The vaccine is making them think they have an infection. And so, it's just like mind boggling. But yeah, you know, you get into that, you become.

Yeah. Gotta watch out. It's it's the politics unfortunately. And I, I love medical debates, but unfortunately it's rare. You know, everything becomes very political and right.

People take it very personal too, you know. Yeah. So kind of back to the title. So how about, you know, fatigue first comes in I'm fatigue. I thought I was so tired.

It's been progressive over the last 3 or 4 years. What what type of things do you look for? Well, aside from the things that I've already talked about, you know, immune system and making sure that their organs of elimination are working and treating latent chronic infections, you know, and you mentioned hyper coagulation.

That's a big deal in my practice. You've got to look at that thick layer of fibrin that's getting laid down. So we definitely use you know, I think heparin is great.

Even sublingual heparin, I've seen work. But if somebody is coming in with fatigue, then obviously I'm going to be thinking about, well, what's going on with your mitochondria, what's what's going on in your intracellular and extracellular environment that you know, you're not able to, kind of function at the, at the level that you want to.

So, you know, we'll do a lot of different IVs. We'll put them on different mitochondrial formulas. I think there's some peptides that have been, you know, really helpful, aside from the ones that we've already talked about.

I think thymus and Alpha one, you know, when a patient first comes in is a really good opener just because you're dealing with senescence and kind of removing that camouflage if there are any latent infections there.

I think might ask, you know, is an exercise mimetic. It ramps up Ampk. There's, you know, there's it's so, yeah. So, so a lot see, there's so much research now going on on mitochondrial dysfunction.

And you look at every just about every condition, especially diseases of aging, neurodegenerative diseases, diabetes, mitochondrial dysfunction. You know, the mitochondria aren't burning energy.

They're they're basically causing inflammation. And so some of these peptides, like might see, five amino one Amcu, all of it, but they hexa in there.

But can really make all the difference. And they're there a lot are in clinical trials for Alzheimer's and these things. But, yeah, we've had great results.

With, with some of those mitochondrial, peptides and yeah, the, the problem I had with might as well, I didn't have the problem, but my patients had the problem is that the form that we were using seemed to be a little bit finicky.

You know, you gotta draw it up. You gotta use it within a certain time. And having to reconstitute different things. And, I don't think that there. Yeah, I just.

Right. Yeah. And if I mean I want to cuz great. But it's really a new drug, you know. Yeah. I don't, I haven't used that. Yeah. And, I won't go to the, you know, the politics of that, but, like, I had people OCD two days, it's gone.

Wow. Yeah. People I, him, one of our employee's kids, he was in college. Pull that all or or eyebrows and within just a couple of days on it, just, it's, Yeah.

Yeah. Crazy. And seeing, like, diabetics or just triglycerides coming down there, energy levels going up. But, you know, the other type of thyroid, all these people are low die, right?

Which comes from mitochondrial dysfunction. Right. Is that the thyroid is not getting into the cells. But yeah. So it's all that vicious cycle. Yeah. I think T3 is really helpful.

You know, I when I dose it with patients, I always I try and do it twice a day. I don't, I don't know you're, you're much more well versed in, the thyroid stuff than I am.

But there's, there's arguments to everything. Yeah, like like it. It's the it's good for this, but you give up, you know, if you do something twice a day, patient care does it.

But yeah, you can, you know, want to be perfect. Yeah I don't I'm not trying. Like I said, it's every excuse that it's anything but, No, I mean, I think, but there's a lot of ways to do it.

Yeah. Right. Yeah. So kind of like asking, what's the best way to bake a cake, right? Right. You know. Yes. Five and six. You know, the the other thing, just to get back to the fatigue that I haven't really mentioned is, you know, looking for looking at heavy metals.

I've seen that be a big cause of fatigue. I know that's been around in alternative medicine for a really long time, and I feel like more and more practitioners are starting to kind of get away from it just because there's some heat associated with the treatments.

You know, you got to be careful. There's going to be heat. And, you know, and I've kind of mentioned that maybe too much, but it's everything's at risk of going away, you know.

Yeah. And what are you going to do. I mean like it's going to kill like all these patients that it's changed their lives and also all the practitioners, all the suppliers, all the company pharmacies.

And it's the FDA, it's patient. They, they own, you know, the big pharma owns them. They're the Bulldogs for the FDA. And especially if something is helping someone is safe, they're going to try to shut it down.

Yeah. Well, we we've seen that even with some of the, some of the peptides. Yep yep yep. And so it's the, the politics I could certainly, do without let's see, brain fog.

What, what what are some of the things that you like? Well, since I'm thinking about peptides, you know, obviously C and C Max, would be a really good place to start.

I think c max is really important for cognition. You probably read that mouse model study that was done where they gave rats the infusion of lead, and then they put them through a maze test.

Right. And their learning and memory went way down. And then they split the group. They gave like half of them C Max and the other half high dose vitamin C, you know, based on their based on their weight and the group that got C max, their cognition improved just as well as it did with with high dose vitamin C.

So I think that's that's a really big deal. I think making sure that patients, you know, if they, if they've got fatigue, chronic pain, fibromyalgia, they need to be on a good diet.

You know, you can't be feeding your body a bunch of crap and expect to get good gas mileage out of it. Right. You need to be living a clean life. You need to be exercising.

Exercise is a huge thing. I mean, hey, we got peptides now that makes your body think it's recognizing and then you're fasting. So right, who needs it?

I wake up religiously, do a shot. But, that's pretty good. Yeah. Just, you know, with the C backs and see, like. Yeah, they're interesting in the C, like, really seems also help.

Tolerate stress as well. And, tribulation abuse. Tribulation. Yeah. When we, when we could get it. Yeah. Which really can't get injectable anymore. But you will be able to get it orally, which is shown to work with EEG studies, where one cap equals about two ccs.

But that's been around forever and tons of studies on that. And I think two are going to find, you know, with all these chronic illnesses, people are living longer.

It's going to be so much dementia, Alzheimer's. And, you know, you look you look at the studies with, oh, she what's his name now? McCormick. Harvard brain Bank.

But he found Lyme in all the Alzheimer's patients. And, you're getting, you know, basically, prions or these misfolded proteins, which are actually part of Alzheimer's from infections.

And, it's crazy. The more we know it's it's it's all scary. But it seems like there's things that we can do to start now instead of waiting till they're basically that nothing you can do.

Right. So Cbd's been pretty helpful for a lot of my patients to like 20 to even 40mg a day. It's kind of high. They say it doesn't make them drowsy. Do you like, do you find it seem broad spectrum versus, Yeah, we use the broad spectrum.

That's the one. That's the one that we that we have in our. Am I allowed to say brand names here? Yeah. That's fine. Yeah, we use that in Doka products.

I don't have any affiliation with those. You're not telling. So yeah. No I don't I don't know the company so no. Yeah. Yeah. They, they've said that's been really helpful.

Yeah. And Doka. Yeah. And there's actually I mean you know they know their stuff. I you know it's amazing. And

but I found, you know, I think some people do better with little.

See if I have a, the most my new amount of teeth, I'm like freaking out, you know, me too. But so I mean that that's not for me.

Fatigue, Brain Fog, and Mitochondrial Support

But some of my patients think do better with with the THC. I think CBD is another, you know, great anti-inflammatory and, has a lot of great properties.

I think binders are a big deal, too. We haven't really talked about binders. I use a ton of binders. I mean, almost every single patient that I have is on some sort of binder and they see like.

Yeah. Which ones in particular do you find for one patient in particular type or ceramic or. Yeah, cosigner means tough. You know I like it I think it I mean it's probably the best binder there is.

Especially when you're talking about mycotoxins and things. But so cons to painting smells like crap. Patients don't like it, so I'll use, toxins. Bind.

That's a product. Again, I don't have any affiliation with any products at all. Yeah. So that's been really good. And that's non cons to painting. Yeah.

So you can keep back and say what is a binder. Yeah a binder is a sponge. That's what a binder is. A binder is a great example is charcoal. Charcoal is a binder right.

It's going to bind up toxins that are in the gut and, you know, put it in the sponge and then you're you're going to excrete it. And patients will say, well how is that going to help me systemically?

You know, if it's just staying in the gut? Well, there's only one cell layer between the lumen of the G. I track and the blood system. So I think that it's having some synergistic effects with, how people are feeling neurologically.

I think zero bind is helpful sometimes. Chlorella is really good, even if they swallow it and not chew it. That's been really helpful for brain stuff.

Charcoal is a big deal and I can now see like, well, what are some of the mild ones that people can start with? Well, you know, so if we're talking about mild yet effective, I would say I would put chlorella in that category.

And the way I dose it is usually like nine tablets three times a day, modified citrus pectin. And then there and then there's binding all the other stuff and they're on a bite.

Yeah. But that's the thing. You know, if you're doing it three times a day, it's a pain in the church because you've got to take it. I always tell them, take it 20 minutes before you take anything else.

That seems to be enough time for that binder to get in the GI tract and not bind up other things, 20 minutes before or 60 minutes after. And I know there's controversy around that.

Modified citrus pectin, I think is a fantastic binder. You know, there's been research on that showing, what is it? It I'm having a brain fart here. I think it inhibits galectin three, which, you know, we know is important in cancer progression.

Yeah. But also, a license, big product. Yeah. Yeah, yeah, exactly. Yeah. And then there was that study that they did in China where they looked at lead excretion.

It wasn't a great study because there was no placebo group. But their you know, their urine metal levels went down. They're cadmium they're arsenic and they're and their lead levels.

And that one's easy. It tastes good. You know, if you use like the, clinical synergy or something like that, kids love it. There's that little flavor tablet.

I haven't used that in a while. Is that on my. Yeah, my bathroom for a long time, but yeah, it is. I mean, there's the problem is there's so many great supplements and, it's, but remind me we're talking about something will happen, and, you know, it's very low absorption.

But I read a study that last night, maybe this morning, but, it's, they gave ultra low molecular weight heparin, with kind of same. And they got significantly more absorption.

And they were looking at mast cells. And, you know, if, you talk to mast cell guys, heparin evens. Right. Oh my God. It's like because they check it, you know, that's like an ace or a tie.

And now, you know, Nestle. The mast cell group, very intelligent people. And I'm like, you can get me out of group, but I you separate on this masterpiece.

I'm telling you to do better. And even they kind of convinced me. Oh, you can't do that. I started trying to take the patients all and switch it like low and oxygen.

I'm not going off or you're crazy. And. But this study actually showed with sublingual with kind of same suppress. That sounds unreal with the heparin.

And so that's part of the I think the effect, that we find and I think you find that like somewhat shortness of breath. I'll see you give a little heparin there.

Like my shortness of breath has gone, you know, and just right for BCA patients and things like that. Well, we've had patients in the IV room before who, you know, they feel like they're going to vasovagal they go going, they have a little bit of a panic attack and we'll give them a squirt of sublingual heparin and it'll pull them right out of it.

I mean, maybe it's placebo, I don't know, but I haven't not had a lot of that yet. I love that. What made you do that? I, I was at a conference a few years ago in Butch Schrader.

Doctor Schrader was talking about LDA and LDA and what to do to pull somebody out of a flare. And he said, give them a little. I kind of pull them aside, I think, and ask them.

I don't think he said it in front of a group, but he said, give them a little sublingual heparin and see if it works. And so I just said, well, I stay well, I yeah.

And it's so easy. You know what I mean. Very low very low risk when you do it. All right. And that's like I said, I feel vindicated. Yeah. It's yeah. I've got it's been thought to be bad and it's a mainstay.

It's like when people have quiet elation. That's it. That egg that is, good news. Bad news got good news. Is that coagulation problems. And we can clear this up, you know, have all these enzymes as well.

And, nano kinase, lumbar kinase. But I think, that those are you can use them together. But I think for someone who is active, I think heparin really just outperforms the, you know, the enzymes.

But to keep it away, I think in terms of grace. Yeah. How are you? How long are you having somebody on enzymes before you start to see coagulation stuff?

Turn around? They put me in a tough place. Yeah. I mean, I usually will start heparin right off the bat. Yeah, I mean, I, I try to find a reason to get hyper.

Yeah. I mean, I think it takes too long, you know, with the enzymes, I love them. I love the idea of it. And of course, his work is amazing. She's wicked smart. Sorry.

That's my New England coming out. Yeah. So I'll, I'll add it with it and sometimes not, and then kind of use that to keep it away, because once you kind of get it away, they do pretty well for a while.

Unless they have reactivation of it, because it really only comes up if it's just sitting there and like, you know, lining the vessels and the, infections are hiding there.

And so for the, ever listening. So what happens? It's called immune activation of regulation. A number of infections can do it, especially. But this is a big one.

Lyme, even some of the viruses is that the body tries to lay down this fiber to wall off the infection, which is good in the short term. But now it has it's not a clot, but it's kind of a pre clot.

So now hormones can't get through. Nutrients can't get through. Waste products take it out. And the body can't really get the infection. And then also the patient is like two seconds give in the cells now takes up to two minutes.

So people get like short of breath in a little parlor trick that you can do to show patients. And it's pretty consistent. But it, it does depend on, the, the people's basically how motivated the answer is you put a pulse ox on right?

You blow out all your air and hold your breath. And then so a normal person so you have the oxygen now normally comes from your long that's, you know, in, from your, lungs into the blood, goes into the cells, gets used up.

Okay. So that would go down. But your breathing, it replenishes. If you cut that off that saturation should go down. So they start dropping deep, deep.

But people with coagulation, they barely drop. They'll stay at 96, 95 and they don't go down in the standard doc. That's great. You get all this oxygen in your blood.

It's not getting the tissues right. And yeah. Yeah. And so it's a little pain to show the patient and they'll have like we'll do with the patient and their friend.

And they'll see there's basically flat line and their friends goes down and they think, well mine's better now because the ox is not getting what should be.

I think ozone is, really helpful too for increasing oxygen utilization and plus it. Yep. Yeah. Stimulates NAD, which is a big deal. That's been about that's been a big help in our practice for cell activation syndrome.

Yeah. We love ozone and yeah, you're right. It's, a new modulator. You know, it's where you're giving an oxygen. But it stimulates antioxidants. It converts to oxygen in the tissues instantly.

Instantly, like, within milliseconds. And and so it's there's so many great properties and, you know, rowing going over to Sierra Leone and treating the ball.

Now, that was cool. Yeah. And I kind of like take like, and yeah, it's pretty much a mainstay for our practice. It's it works with a lot of things our immunity, immune dysfunction, chronic infections, mitochondrial dysfunction, you name it.

Even a patient we've had patients with pans, pandas, flares, you know, they come in and they get, you know, a little bit of ozone. They walk out about it.

Yeah. Yeah. I love that. For our immunity, the BPC, TB for a battalion is also great. It's kind of gets a little complicated, but, and then, stem cells.

Awesome. And then the bone marrow ones, there's one thing I think they're better at doing is, again, modulation. For autoimmune. But, you know, most standard doctors think you can't do much about, oh, you got immunity.

That it, but almost always you reverse it and you look at, the studies almost always as a chronic infection driving out immunity. Right. And you have the Lyme patients, you know, they go to the rheumatologist, they say, oh, they got mixed connective tissue disease, which means they have all these different antibodies.

But he doesn't fit in the category. And they get Antifa, a phospholipid syndrome. And they go, oh, or all these things are genetic. No, they go away, you know.

Right. But, yeah, it's you get a separate immune dysfunction. Well, and if you've got if you've got viruses that are living inside your cell because a virus is just a parasite, that's all it is, right?

It needs a host in order to in order to be able to do its thing then or even aspire key. Then of course, your immune system is going to become activated and say, hey, you're a bad cell, right?

Pain, Coagulation, and Ozone Therapy

And then if you add on to that, you're looking at things like all of the toxicants that are in the environment, from chlorine to whatever, you know, chlorine is displacing iodine in the thyroid cell.

And of course, your immune system is going to look at that and say, hey, you're not functioning right. So yeah, and highly associated with autoimmunity and it's interesting.

And there's a lot of study on the obese, children and looked at Hashimoto's and they found that majority of obese children had Hashimoto's with negative antibodies.

And also another study, they did thyroid biopsies, people who were just fatigued and they found inflammation in the thyroid treated with thyroid regardless of their thyroid levels.

And the over majority got significantly better. Another study showed that, people with chronic fatigue syndrome did biopsies, had eight active, had six in their thyroid, but nowhere else in their body.

Right. Yeah. So it's like, and and, you know, the course is normal, but of course. Right. Yeah. Your thyroid is fine. Don't worry about it. Yeah, yeah.

And, let's see, neurologic symptoms. What what type of neurologic cells always tell patients that the weirder the symptoms, the more likely it is. It's Lyme.

Yeah, I agree with you. So are you wondering what kind of neurological symptoms that are. Yeah. Yeah. I mean, I just see, Yeah. Yeah. I mean, we see a lot of it.

So, you know, anxiety and you do a lot of injections. You're saying I do a lot of injections, but when I, I guess I don't understand the question. Can you ask it again? I want to know just. Yeah.

Like what type of neurologic symptoms you see what, Lyme patients or then I kind of did I kind of switch the question to you do a lot of injections. What injections you like for pain. So I kind of.

Yeah, I mix the two. Okay. Well they do part A or B. Yeah. Well I'll, I'll, I can hopefully briefly answer both of them. So for neurological stuff we run the gamut.

You know we have everything from anxiety, depression, anger, irritability, OCD, paranoia I mean full on paranoia. To, you know, just kind of your regular, anhedonia, not really feeling good about life.

Other neurological things like twitching, muscle cramps, you know, usually our patients there, when I do a muscle strength test on them or check their reflexes, they're always abnormal.

Do you see a lot? Yes. Yeah. Especially early. Early in treatment. And then when we work on the infections, that

gets way better. Yeah. And so that's the space where your muscles kind of look like a bag of worms type thing.

And it's basically, pedaling for an upper neuron disease. And I am terrible physically. So I'm like, oh my God, you know, that upper neuron disease. And but it's amazing everything that line down is attacking the nerves, you know.

Right. Yeah. What did you get? So that happened to you. Terrible for circulation too. Yeah. Yeah. And what was the thing that helped treat that for you?

Well, yeah. Three and a half years of antibiotics did squat. Really? Peptide stem cells, those. Yeah, a lot of things. But those were the three key things that got me better.

Yeah. And, 33 in that two. Yeah. Okay. Cool. Right. To tell, you know, so I did a lot of those. Yeah. It you know, I remember when I went to heart failure and I, I couldn't stand up straight, I couldn't it would take me 40 minutes.

Go upstairs. I went did ozone stem cells, like, I didn't do it on same day, but I did, stem cells and peptides. And then I got home and I just walked up the stairs the like, Holy crap.

I just walked up the stairs. You know? And then the cardiologist said that you can maybe get 10% better in ten years, and I'm hunched over in his office not be able to walk, you know?

Yeah, I'm in 10% better ten years. I'm like, that's a death sentence, you know? Yeah. I hope I can go back a year. I'm like normal. And he goes, oh, that's nice.

Yeah. It's crazy. Yeah. Sure. Thanks for sharing. I was curious what your experience was with that. In terms of your second question, treating, treating pain.

Yeah, I do, I do a lot of injections. I'll do pros own. I'll do neural therapy. I'll just do, you know, injections with 5% dextrose. Sometimes I'll mix in a little bit of prochain, sometimes I'll do a little bit of light a cane.

Injections have been really helpful because you're bypassing the gut. You know, when you, when you do an injection on somebody and if you do it intradermal rate underneath the skin, then you're treating the nervous system right.

Because, you know, that's where that's where the autonomic nervous system is. And there's not a place in the body that isn't being fed in some respect by the autonomic nervous system. Yeah.

And then prior to an OCR going into articular or in soft tissue or. Yep. All the above, all the above. And you know what's interesting. And now I'm very used to it and even talks advantages answer.

Now do more of this where like a buddy who does, you know, stem cells, exosomes. He just does subcutaneous, you know, and he will give the people's money back if they're not significantly better before they leave the room.

Money. And, you know, we have, you know, what does. Oh, that's crazy. And he me to, and he had frozen shoulder, which I didn't I didn't know I knew him by now.

And so he does it. It's like, nothing's happening. And he goes, okay, it's like then he goes, I don't know, don't to, but, and that was just subcutaneous exosomes.

Yeah, yeah. Unbelievable. Yeah. Anyway, he added some peptides to it to. But, and it just a consistently gets a he gives that guarantee and and I know a lot of anesthesiologists who are converting to that, which is like heresy, you know.

Right. Yeah. Yeah. I think injections are really helpful. You know, it's a little bit of a barrier for the patient. You know, it's an added cost sometimes and, somewhat barbaric.

Right? But, hey, subcu a lot easier than inter articular. Yeah, yeah, yeah, but when you've got somebody who's got, chronic knee pain and, you know, you've got an infection that's living in the joint because it's a, it's immune system poor.

And there's a ton of highly chronic acid in there which we know bugs love to eat. If you can go in there and put a little bit of ozone, they're they're going to respond really well.

I mean, I would say I probably had 85 to 90% success rate just in terms of people being able to walk downstairs and bend down and get stuff out of the cupboards.

Sometimes just after one injection, beginning. Yeah. I mean, we're, you know, I was this was 20 years ago. They needed, you know, hip replacement. And, you know, it's, well, well, we're all, you know, young.

And, the orthopedist is limping, by the way, and he's like, yeah, you need hip replacement. Like, what about you? This is like PRP and stem cells, and ozone is doesn't work.

And then I'm like, what do you recommend? He's like, so this is the surgery we're going to do is I had the same surgery. Oh my. What's wrong with your leg as well?

My bone collapse was in traction was for four months. I got nerve damage. I'm like okay. And then so, you know, I go and do, you know, combination, you know, initially PRP, stem cells, ozone, and later on we can discover peptides and those, was probably within a year.

I mean, 3 or 4 injections, 70% better. I could even tell my shoes. And then second year, 80%, 90%. Now I even got an injection and five years, you know.

Wow. Yeah. You know, we've talked a little bit about Tb4, but Tb4 has been great for pain and and BPC 157 I mean, even, you know, whether you're doing it intradermal or, orally.

I found that to be really, really useful. Yeah. And it's actually equal potent orally. Super systemic. Yeah. And they both, you know, more studies on TV for but a lot of people feel BP, they tend to have the same effects with different mechanisms that are great to use together.

Yeah. I love it. Yeah. There's a lot of studies on tb4.

Closing Thoughts and Final Takeaways

I mean, I was reading some stuff. It's anti fibrotic. We know it's antiviral. There was that liver protect of what do you think we're supposed to your, your partner was saying I guess cheese is more TB for frying I think used more TB for.

I'm switching now though. I like the frag better. I feel like patients tolerate it a little bit better. When I was doing TB for, you know, the injection I was doing that big loading dose, you know, in the beginning and then, you know, whatever, 20 lines or 0.2 miles, you know, every other day or however, however, I was rolling it out, I was having a lot of patients who works on that.

Yeah. Yeah. So a doctor about how, you know, TB for 30 minute acid has multiple domains. And what are the domains, stimulants, medicines. And so, you know, in general you give TB for the Marseille patient in general they're going to do better because need modulation.

But you got a competing effect that it's directly stimulating the Marseille. So the TB for frag takes out that domain that stimulates mast cells. But it has you look at the studies you know the mandatory you know age of entry the healing anti fibrotic.

And there's a different fray in a different domain that stimulates hair. So if you want to grow hair it's probably better

to use the frag because it can get into the scalp better then than the long peptide chain.

Very cool. I didn't know that about the hair. Yeah. So I mean I would be bald. I I've had hair transplants. I know how many years ago and it was and I can't I'm not good looking enough to pull off the van.

Diesel. Yeah. And I got a big star. But very like I had brain surgery, so I'm like, I gotta get. I gotta get my hair. Good. So this is actually the biggest it's been in 30 years.

Wow. That's awesome. And you're in. Is that just from taking it orally during the TB for Frank? Orally. And I do like, serum on it. Oh, yeah. Yeah. Cool.

I do sometimes injections of. But I'm, I'm wimpy. With that plus with the scar, it makes it hurt a lot more, so I, I don't do that many injections, but I do have.

What about the, GHQ? Have you seen that? How? Yeah, I think it's good. And actually, it's interesting that the, literature is mixed on really how much it absorbs.

So, the Gchq, see, you don't see those are much better than the Gchq. So if you get if you get that, make sure you get with the see you on it. But yeah, that that's great.

Then you had a, you can add that to, to peptides sometimes to make them absorb better, but you get an increased cost and things like that. Another synthetic become new drugs.

So yeah. Yeah. But yeah, I love, Gchq. Find me a win. Maybe even better than the, than TV4. But the TV for Frank for hair is smaller, so it's going to get in better from 5 million.

Although 5 million absorbs better than you would think because it has, some non-polar, amino acids. Oh, yeah. You can tell we've been working on this, but, yeah.

So, you know, we have good results with, with different sounds, but. Yeah. So we made the whole gambit. We went from T-Pain, Brain Fog all the way to hair there.

Yeah, us, the house. So, so, yeah, we're we're in LA, so it doesn't matter how you feel. It's how you look, right? You got it. Here with my tooth from Amazon and superglue.

So, hey, great talking to you. Just, I think we came across a bunch of different pearls and love your approach and, you know, just, helping so many people.

I think your group is awesome. And, with. Which is rare to get a, awesome doctors together, so that. That's great. And, thank you for taking the time to be on.

Sure. We didn't get a lot out of this, and, really appreciate it. Hey, you're very welcome. Thank you, too, for having me. And thank you for everything that you're doing for medicine.

You're doing a lot. Thank you, thank you, thank you. I appreciate that you. Thank you for the great work. All right, all right. Take care. Thanks.