250221_DrThaik

Me

I'm just going to record if that's okay with you.

Dr. Thaik

No, no worries. No worries. I'm just about to tell you, too, that I'm using an AI Skype, too. It doesn't record our voice or save any audio files. It's just going to transcribe the notes. Okay?

Me

That's awesome. Yeah. Cool.

Dr. Thaik

Yeah. Perfect. All right. So it looks like we are here to review the autonomic nervous system testing. So before we get into that, can you just tell me how you are doing?

Me

I'm doing pretty well. Let's see. I was not doing well for a moment. I went to New York, and I was spending time with family, and I wasn't treating my health right. And I actually got pretty bad. So when I came back, and when I said I got pretty bad, I mean, like, having a lot of issues with lightheadedness, having just difficulty holding my body up for long periods of time while working. I got sick. I got ill. So I came back here to Los Angeles, and I switched up my diet, eating very healthy now, Mediterranean diet. I actually got this app called Visible, and it's made specifically for people in the ME/CFS community.

Dr. Thaik

Oh.

Me

And this actually relates to this specifically because there's a breathing exercise that comes with the app, coherent breathing. And so-- Oh, nice. Yeah. And so I felt--I've definitely felt--I mean, I'm doing 40 minutes a day, broken up throughout the day. And-- Okay. I've definitely felt a big improvement in just how I react to things in terms of, you know, the nervous system.

Dr. Thaik

Can you send me-- Can you send me-- Yeah. Can you send-- Drop me an email with information on the app. I'd like to check it out and maybe recommend it to other patients of mine.

Me

Yeah, absolutely. Yeah. I think that would be great.

Dr. Thaik
Right.

Me
Yeah.

Dr. Thaik
And then I see a [MRI] scan in here. So it looks like you have pretty moderate neuroforamen stenosis in your cervical region. What's being done about that?

Me
Oh, the MRI, yeah. Nothing yet. I have to get--I have to get another MRI of my brain and my brachial plexus in a few weeks. So we're going to revisit that with my neurologist once that's all done.

Dr. Thaik
Okay. And then do you have--are you measuring your blood pressure at all? Do you have a weight and a blood pressure and pulse in me?

Me
Yes, I do. I only measure it in the morning right upon waking up.

Dr. Thaik
Yeah. Sure.

Me
But let's see. My weight is 165 and my blood pressure today was 107 over 72.

Dr. Thaik
Okay. And you're a tall guy, 5'10".

Me
Yep.

Dr. Thaik
And so when your blood pressure, you know, sits in that range, you know, obviously when you get upright or postural, that blood pressure column will drop and then you'll get some of that lightheadedness symptoms. Are you doing a good job with your hydration?

Me
Yes.

Dr. Thaik
Great job.

Me
I mean, I think I'm drinking more water than ever and plus I'm eating huge salads for lunch with lots of, you know, liquid, you know, water heavy things in it.

Dr. Thaik

Okay. All right. So let's just go and take a look at your results. Can you pull them up for me?

Me

Yep. I'm taking a look.

Dr. Thaik

Okay. Okay. So hopefully she sent it in the order. But so the first case that I'm looking at is just the ANS function report?

Me

Yep. I see that.

Dr. Thaik

Okay. Okay. So this is, you know, sort of the skyscraper summary view. Okay. And it's showing, you know, the various maneuvers, the deep breathing, the valvalsa, when you're lying down and when you're standing up. Okay. And just, you know, on the skyscraper view, just visually I can see that you have really great heart rate variability. Okay. So whether it's the, you know, the breathing that you've been doing in the app, you know, or this is something that is sort of, you know, innately intrinsic to you, you do look like you have really good heart rate variability. Right. This will serve you well. Okay. And so when you look a little bit further down at those color strips where it's a very low, low and normal, you can see that you've hit the normal in each of the parameters, whether you were doing the valsella, the deep breathing, or the orthostatic tilt testing. And this is being compared to a standard population. And so understand that this software or this computer program is out of the University of Norway. They've been doing, you know, research in this area and heart rate variability since the 1990s when it was, you know, heart rate variability was first like defined and then we saw its implication with the medicine. And so they have, you know, a huge, you know, population of, you know, data points. Right. And what I usually like to point out to patients is that this is all common. So it's not age match. It's not sex match. It's not disease match. Meaning that, you know, initially they had a whole bunch of, you know, test subjects, which are presumably healthy individuals coming in and just, you know, providing data for research. Since then, you know, their program and software is used in hospitals, used in doctors offices, and obviously it's used by cardiologists, neurologists, and endocrinologists. And so, you know, you have a mixture of healthy individuals as well, you know, people with diabetes or neurological symptoms and everything. So just sort of all comers and we're just looking at where you fall in line with all comers. Okay.

Me

Great.

Dr. Thaik

And so this is the skyscraper view. The next page, it should start out with HRV Results DB.

Me

Okay.

Dr. Thaik

Yep. Okay. So this is looking specifically when you were doing the deep breathing. If you go middle of the page where it says PNS index 0.55 and then FNS index 0.72, those are your raw data number. And then next to it, you can see the bell-shaped curve. And that's just sort of depicting the standard deviation of a two standard deviation being like the 97% confident interval. So, you know, the bulk of the individual will fall within this two standard deviation, right?

Me

Yep.

Dr. Thaik

And so this is sort of just like taking a look at you and saying where you fall within that, right? And so I usually look at your numbers and compare it with the population. And then I look at your number and compare it with the various maneuvers. So you're comparing you within yourself, right? So when you're doing the deep breathing, this is when we increase our vagal tone and decrease our sympathetic. And so you should look pretty good when you're doing the deep breathing. So yours is 0.55 and 0.72. So then you go to the next page with your valvalsa maneuver. That's like you're stressing, you're straining. And so intrinsically we expect that this is like stimulating your sympathetic nervous system and downregulating your parasympathetic. And so we want to see that your movement goes in the direction that we would expect. And so you can see your sympathetic index goes up, your parasympathetic index goes down, right?

Me

Yes.

Dr. Thaik

And so this is what we were expect to see. And this is a normal amount, right? Like so if, you know, and I've had patients where they do this and it goes out to seven, eight, right? And so that would be extreme, right? But this looks perfectly fine, right? And then immediately after that we had to lie down and you could see that your numbers draw back into the midline, right? So 0.7 and, you know, 0.6. And then, so, you know, when you're lying down again, the vagal, this is like decreasing sympathetic, increasing vagal tone. And then the next material is when we expand up and so we can expect those two numbers to sort of pull away. And so there again, it does that appropriately in the, you know, negative two and two range, right? And so I would say that...

Me

Got it. So, so could I just ask, so the bell curve is basically, that is the, that is the, it's all the same. So the bell curve doesn't change.

Dr. Thaik

So the bell curve, you know, we're not, you know, so when the company gets the data, right? They don't know who's, you know, doing what, right? And, you know, they, you know, so, so this is just, you know, so the bell, bell curve is going to stay the same.

Me

Yeah.

Dr. Thaik

Whether you're lying, sitting, standing, doing the bell valve or whatever. So it's just, it's just, you know, all the data goes into a bell curve, right?

Me

Right. So that makes, that makes a lot of sense then. Okay.

Dr. Thaik

Right, right. So, so, so the bell curve doesn't change. And so we will expect you to pull out when you are standing, right? And so, so as long as you're still sort of in that, you know, even if you're on the tail end of that, you know, two standard deviation, as long as you're close to that, we know that we're, we're eliciting a maneuver where we expect, you know, you to be more stressed, the body to be more stressed and, and the heart rate variability to be, you know, to be less conversated during that time. And so, you know, we want to see that, you know, we want to see that you have the variability. I mean, we would be concerned if your sympathetic didn't, didn't change at all. Right. But we want it to change relative to your own norm. And we want to see where it pulls away. Now, I, what I want to see the, you know, when you stand up, what I want to see it go to, you know, six, seven, eight. No. So that, you know, when, when an individual does that, then we know that they are not able to appropriately compensate for, for the changes in the maneuvers and so forth.

Me

Right.

Dr. Thaik

Now, let's just say that we were somehow, you know, had this information on you when you just like, you know, you're driving on the four or five freeway and you just got, you know, sight swiped, you know, sight swiped and you just pulled away and you like, you know, like missed a fatal accident. Right. Well, in that situation, yes, I would expect the sympathetic nervous index to go on to the eight, nine, ten, right? And so it is really about, you know, does your, you know, is the nervous system reacting and responding appropriately to what we think, you know, should be the case. Right. Now, let's just say, you know, you came into our office and you were severely dehydrated. You know, you just, you know, you're coming from a flu, you've been, you know, vomiting and having diarrhea just the night before. Right. And then we did this exact same test. We would expect these numbers to, to be different. Right. Because your body is not able to be compensated and you are, you know, you are going to be in, in, in just that much more of that fight and flight

mode. Right. So, so this is just going to reflect, you know, what is my body doing at this particular moment in time?

Me

Yes. Makes sense. Of course.

Dr. Thaik

That makes sense?

Me

Yeah.

Dr. Thaik

Okay. So if I look at this, I think that, I think you are, you don't have to worry about the nervous system. Um, um, um, reacting and responding appropriately to whatever might be your situation going on. Um, and, and, and like you said, Hey, I was in my family, you know, they have, I got, you know, I got sick. I was traveling, uh, wasn't eating as well. I know my body's off. Right. So, you know, your body is off for all these reasons. Right. And your nervous system is going to respond appropriately as well and reflect that. Right. Um, and, and so this is to me, whenever I look at this, it's just a, a, a, a stark reminder, right, of how, how complex our bodies are and, and, and, and, and, and really like understanding the systems that, um, goes into trying to, you know, maintain homeostasis or try to keep our body, uh, as right as possible.

Me

Yep. Yeah. Yeah.

Dr. Thaik

Okay. All right. So that sounds good. And, and I think that, um, you getting, uh, you know, sort of getting to know yourself better and, you know, under, understand your own body physiology, I think is a great thing. And so, um, you know, just, just keep, you know, being mindful of that. You know, I, I think that if I look at the vascular test, it looks great. Your holter monitor wasn't anything to be concerned about. So I think most, most of, you know, your ultrasound likewise, um, looks good. So I think most everything checks out for you. Okay. And, and just like, you know, understanding that there will be, you know, fluctuations and imbalances of time. And, um, but just trust that your body is equipped to handle it.

Me

Great. Yeah. And I'll say, I mean, just again, with the lifestyle changes, um, it's not perfect, but it's definitely helped a ton. And, um, so I'm feeling pretty good right now.

Dr. Thaik

Sounds great. Sounds great. Do you want to get set about a six month appointment? Uh, we can even do it to be honest. We can even go a year or, or even as needed. If you want to call back in and let us know when you want to come back in and see us again.

Me

Yeah. You know what? Let's do it as needed. I'm very, you know what I mean? I'm very on top of this stuff. So if my symptoms do get worse and it is related to the cardiological portion of it, I'm going to be able to get a few tests over the years. I've done many cardiological.

Dr. Thaik

Yeah.

Me

It seems like, you know, it's definitely not cardiological just from all the repeated testing. But of course, things are worse.

Dr. Thaik

Yeah. I'm comfortable with it. I'm comfortable with it. And so, so if you, if things change it for you and you feel like you want to take a look again, then come on back and, and give us a call. Okay? Sounds great.

Me

Thanks Dr. Thaik. I'll email you that information for the, uh, visible. I think you'll find it really interesting.

Dr. Thaik

Perfect. Perfect. All right. You take care of yourself, Robert. And reach out to us anytime.

Me

Okay. Thank you. You too. Bye.