



Dr. Joe Schneider - 00:00

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Welcome to my POTS podcast. I'm Dr. Joe Schneider, and after 35 years as a functional neurologist, a personal journey through stroke recovery, and helping thousands of patients, I'm here to share breakthrough solutions for POTS neurological wellness. From getting out of the bed in the morning to rebuilding your nervous system, this is your guide to understanding and overcoming neurological challenges. Let's begin this journey to recovery together.



Dr. Joe Schneider - 00:34

Our patients are calling us because they have multiple symptoms around pots. And I think we can use the broad term dysautonomia. The broad term dysautonomia means that there's many different systems that are automatically controlled by the brain, like your digestive tract and a woman's menstrual cycle, your genitourinary system, are all autonomic functions that happen automatically in our body and respond to nervous system control. When a person comes in and they said, I've just been diagnosed with pots, then I know that there's going to be other comorbidities. And what are they? Brain fog, memory loss, anxiety, chronic fatigue, fibromyalgia, pain, headaches, you know, correct digestive issues, either constipation or ibs. They are all like indicators that your entire autonomic nervous system isn't functioning right. They do have postural orthostatic tachycardia syndrome.



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And so if you try to define one without defining all the functions that are going on the body, then you're doing your patients disservice. And I would think that most POTS treatment fails because it's not fully evaluating the entire nervous system. I mean, as for a practitioner, I'm sure that can be frustrating. So if you go to a cardiologist first, usually the first stop for everyone is a cardiologist. And the cardiologist will say that your heart's functioning fine, they'll do the proper tests and so forth. If it's not, you belong with the cardiologist. If it is functioning fine, they'll give you electrolytes, they'll give you exercise to do hydration, and they'll also may give you beta blockers that can cause a change in your heart rate. Now, all those things are really good.



Dr. Joe Schneider - 02:35

They can be helpful, but if they're not working for you, then you need to find a person that does functional neurology.



Joseph Quirk - 02:44

And even then. So we can kind of relate that to that patch or fix concept were talking about yesterday during the podcast. You know, increasing salt intake and doing aerobic or anaerobic exercise or static exercises, eccentric exercises. They can be great for it, but you know, what's that next level to reach past that?



Dr. Joe Schneider - 03:07

Well, even with those suggestions, patients are not getting enough guidance so that when they work out, they know where to keep their heart rate at. Or sometimes heart rate goes up so high, even if they just stand up and walk a little bit, right. They're basically out of control. Now, in normal life, your nervous system should have fine control of what's going on. You, you should be able to walk up steps, you should be able to stand up, sit down, lay down, you should be able to change positions without your heart rate going off the scales. And then when we talk about training on some of our reels that are on Instagram or TikTok, some of the feedback is. What, what's the feedback? You know, I've exercised my entire life, you know, that's not it. You know, I've always been in shape.



Joseph Quirk - 03:56

Recovering athletes, right? People who did the 40 yard dash or track and field or triathlons their whole life and they just can't do it now.



Dr. Joe Schneider - 04:05

Football or something like that. And they're number one. They're trying to figure out the cause. Was it traumatic brain injury, was it pathogen like Covid or Epstein Barr syndrome? Kids with pans or pandas, strep infections? There's so many things that attack the nervous system. In fact, one of the best conferences I've ever been to was with Dr. Calderon. She's from the University of Montana and then she has been doing studies with kids in Mexico City, specifically, where they're exposed to a lot of air pollution from diesel engine trucks. And she has gone through and looked at the toxic effects of air pollution. And so kids at 12 are developing Alzheimer's and parkinson's disease from the toxic effects of air pollution.



Joseph Quirk - 04:55

So just diminished gray matter, just diminished.



Dr. Joe Schneider - 04:58

Gray matter and diminished white matter, right? So gray is the neuron, white is the axon or the dendrites or interconnections that happen within the brain. Things like just air pollution that can cause it. So kids at 12 will develop a neurodegenerative disease or will develop a neurodevelopmental disease due toxic effects of air pollution and even the nano effects of air pollution. And she also talked about what we look at is a barrier. A barrier, right. So barriers, if you hear the word barrier, what do you think of blood brain. But what else? It's kind of a protective shield, right? You know, you put a barrier up, you're perfecting yourself. So if you look at your skin's a barrier, right? If you look at your lung is a barrier. Your sinuses are barriers, right? Your digestive tract, there's a barrier there.



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We want certain things to get into your body and certain things that don't come get into the body. So when you look at barriers, when you start compromising barriers, then the main barrier gets compromised, and that's the blood, brain, bladder barrier, okay? The most important barrier is your blood brain barrier. So even like autoimmune diseases have an effect on your barriers. Even a nerve has a barrier. The membrane, the membrane, the nerve has a barrier. So when those barriers are compromised, then you're going to cause neurological damage, degeneration. So you either live with it or you do something about it. So what we're doing about it is we want to rebuild it, right? We want to rebuild your barriers, we want to rebuild your nervous system, and that's called brain plasticity.



Dr. Joe Schneider - 06:59

So all therapies and techniques that we have in the office are to facilitate and accelerate neuroplasticity. One of the most important things about neuroplasticity is that you want to look at a cell, all right? So if you look at a cell and the cell's in a storm, okay? So you're a human being and you're in a storm, right? And you're on a boat in a storm. You're holding on, you're doing whatever you can. Takes a lot of energy, right? A lot of the conferences that I've been to talk about the energy source within a cell that can handle the storm, and that's the mitochondria, right? So what is mitochondria?



Joseph Quirk - 07:41

Powerhouse in the cell.



Dr. Joe Schneider - 07:42

It's a powerhouse, right? You can't do anything without power. You know, we're talking about, you know, Donald Trump is inauguration. He talks about energy, right? Your body can only heal itself and if it's got the energy. So even when a pathogen attacks your brain cells, the thing that can bring it back is strong mitochondria. So we need to stimulate them. And so a lot of our therapies in the office, plus a lot of our nutritional programs, one of the primary things we want to do is we want to return the mitochondria to its strength. That can be done by each individual mitochondria being healthy. But when the mitochondria are healthy, they multiply. They have their own DNA. It's like a cellular organelle within a cell, and it has its own DNA.



Dr. Joe Schneider - 08:35

So when a cell is healthy, it becomes more energetic because it produces more mitochondria. They multiply, right. If they're healthy. If you degenerate, you get less mitochondria until the cell says, I can't keep up, sorry, I'm leaving. And the cell degenerates. And we used to call that walarian degeneration of nerves. So the larian degeneration cycle is dependent on the powerhouse. I mean that's like a incredible word, right? You know, your powerhouse. So when you're sick, you only going to respond to sickness, degeneration, illness or assault the storm, assault on the body, if you have really sound mitochondrial function. We have erconia lasers in the office and cold lasers are all over the place. So there's type 1, 2, 3 and 4 types of lasers. 3 and 4 causes heat, but the 1 and 2 don't cause heat.



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2 has more penetration than 1 and 2 does not cause any heat also. So the most powerful lasers, the ones that we use, are called erconia lasers. You can go online erconia.com and look up their lasers, but they use visible light. They usually have visible spectrum, which is violet, green and red. Red has been most popular over time. And then they have infrared frequencies. Well, we find that the most energetic lasers are the visible light lasers. And so we have, we do green, violet and red. So we find that the green, violet, red lasers stimulate the electron chain proteins within the mitochondria. So when we shine lasers on your brain or your body and so forth, we're actually enhancing mitochondrial function, which makes the powerhouse more powerful. When it makes it more powerful, then we multiply the number of mitochondria.



Joseph Quirk - 10:50

It's also a multipurpose tool. You know, it's not just improving the mitochondria, but it's helping improve blood flow, circulation overall. It's also helping break down inflammatory. It's got more facets to it than just the initial

mitochondrial improvement, which is so beneficial in our practice.



Dr. Joe Schneider - 11:12

Yeah, it has, definitely has multiple functions. But when we talk about plasticity, really what happens is there's two things that bring a cell back and make it multiply or improve your tracts. Get neurons from stem cells would be the mitochondria. And then the second thing that's important is antioxidant activity. So an oxidant is what is an oxidant?



Joseph Quirk - 11:40

An oxidant is a protector.



Dr. Joe Schneider - 11:42

Well, an oxidant is a byproduct of metabolism that can be harmful. So once you metabolize things, you produce oxidants and those oxidants can be harmful. To your system. So antioxidant takes that oxygen that's negative, that negative oxygen, it neutralizes it, and so that we have antioxidant activity and then the cells are better. So after trauma to brain, your brain also doesn't like glucose, okay? So glucose produces more oxidants than a ketone does. So a ketone is better for brain function because it lowers the oxidation of your system. So the two things that promote, especially with plasticity, would be mitochondrial function and then use antioxidants. Now, some of the conferences that I've been to have talked about developing new drugs to do it.



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But then at the end of the conference, they talk about going back to the cell, making the cell healthy through improving mitochondrial function, the powerhouse. There's other functions within the cell, like the endoplasmic reticulum, where you're making proteins, you're making certain chemicals from reading your DNA. So those cellular functions are very important to create plasticity. So plasticity is, we're going to improve cellular function and then we're going to improve the tropism, which is the connectivity of the brain. We will grow actual new connections, which I think is like, wow, you mean we've been left with this body that can self regenerate and the nervous system is one of those that things and.



Joseph Quirk - 13:40

Just naturally regenerate body properties.



Dr. Joe Schneider - 13:43

So, but the thought within the medical profession, chiropractic profession, and naturopathic doctors and so forth, has been that once your brain has been damaged and injured, I mean, that's it, you know, you can just put up your trophies and then kind of walk away from like what you did in your life. And now it's like you can get your life back. Terrible stuff, incredible stuff. So if we talk about plasticity, then we have to talk about measuring within the body the different functions that go along with that. So I would suggest that you take this concept today and start thinking about it. If you're within the throes of POTS or dysautonomia and you're having multiple syndromes that are going in within your body, then you look at doing things that improve your mitochondrial function and also your antioxidant activity within your body.



Dr. Joe Schneider - 14:36

If you need help with that, you just give us a call. You can schedule a consult with myself or with Joe, and Joe can also counsel you on the different things that we do in the office to work with people, get your life back, right? It's always about life impact. Well, thank you very much. It's been great to be on with you and we'll see you on the next podcast.



Dr. Joe Schneider - 15:07

Thank you for joining us on my POTS podcast. If you're looking for more support, Visit us at hopeprayingcenter.com or follow our journey on TikTok, where we share daily insights and inspiration. Remember, healing is potential lost on living proof. I'm Dr. Joseph Schneider and I'll see you next time as we continue exploring paths to recovery.