Introduction and guest background

So good morning everybody. I could be afternoon or evening, depending on where you are. Welcome to the, of Summit on Healing. And today we have a wonderful guest, doctor Tiffany Kaplan.

And I've worked with Tiffany in the past, for our Pain Solution summit. But today, we're just going to focus essentially on autoimmune disease. So before we get started, no, not everybody who, is going to be watching this had ever seen the Pain Solution Summit.

So please introduce yourself. Hi. Well, thank you for having me again. Yeah. So I got into functional medicine and really, this world of looking at chronic disease.

Differently from my own personal experience. I worked with a functional medicine doctor when I was experiencing, depression and anxiety and brain fog and just.

You know, felt failed by the standard model of care where they were just throwing medications at me. And it wasn't really it wasn't answering the question, well, why is this happening to me?

And so that's where I fell in love with functional medicine. It really opened my eyes to this whole new world of looking at how do we help the body get through a lot of the challenge that challenges that it comes across our experiences.

And then I have a lot of autoimmune conditions that run in my family. A lot of people dealing with, Hashimoto's and, lupus and I mentioned Crohn's and just a whole list of different autoimmune conditions.

And that was really what got me into looking at autoimmunity as one big area that a lot of people are confused on. They have questions on, and are led to believe that there's nothing they could do for it.

And I think that's very misleading. So that's what I focus on in my practice, is helping people with just better understanding autoimmunity, their conditions of what they have been dealing with and then how to take control of it naturally.

So that's that's what we do in our practice. And I'm so happy to be able to talk to, Doctor Pollock today about how we can use things like Emfs to be a healing tool and really help the body do what it does best, which is heal itself and in combination with what you do.

Because piggyback therapy doesn't work in isolation. No, no, therapy works in isolation. And it's rare that you have one solution to a problem, especially a complex problem like autoimmunity.

Well, thanks for that explanation. I would also like to say, you know, what is your, professional background? Yeah, I started out in chiropractic. I always was more interested in doing things more holistically, naturally.

And then while I was in, chiropractic school, I got introduced into functional medicine, and so I, I went down that path, getting certified, to the Institute for Functional Medicine, functional medicine, University.

Just, I really I take every type of class I can find out there on, just opening my eyes to how all the many different ways that we can help support somebody through lifestyle medicine.

And I think that's important because, autoimmunity crosses all organs, right? Essentially crosses all diseases. And it's rare that somebody with autoimmunity has only autoimmunity as a problem.

Right, right. So being a functional medicine doctor practice, you have to bring together all kinds of skills because you're dealing with a whole person, not a diagnosis, not an organ, not a sex, not having an age, etc.

all that's very important. So that's wonderful. Well, how did you start off? How did you start into autoimmune? I know you said you had the family history, but you went to chiropractic, you did chiropractic training, the traditional approach to chiropractic, right.

But then along the way, I assume we started seeing people without immunity, right? I did, I just, I besides seeing family members kind of go through the standard where it takes years of suffering with symptoms to even get a diagnosis.

And then at that point, they're really just treating the label, the diagnosis and trying to manage the symptoms. And just seeing people just not get better that way was really interesting to me, thinking of things in this different, sense of, well, why is it happening?

Right?

Why functional medicine matters for autoimmunity

Instead of just trying to shut down the immune system or, or throw an anti-inflammatory to calm that down, why is there inflammation? Why is the body struggling to, why is it attacking itself?

That was the big question that was coming up in my mind was like the immune system supposed to protect us. Why is it harming us? That just doesn't make sense.

Something has to be abnormal that's causing that reaction. And I started to see a lot of trends in the patients that were, coming to us, whether they were coming to us for pain or for, fatigue, or just they weren't getting answers in the standard care.

Maybe they were having hormonal problems. That issues. It just seemed like when we started putting the pieces of the puzzle together, we were able to connect the dots between all of these different things that they had going on, and especially when it came to autoimmunity.

Like you said, it's not one thing. It's usually like a combination of dysfunctions in the body that is leading to the immune system. Then having that aberrant attack against self tissue.

So it's just interesting to start putting all the puzzle pieces together. And that's what that's where I that's why I love, functional medicine. But I love autoimmunity because there's like 100 different autoimmune diagnoses.

And really when we kind of dial it in, they're not separate problems. It's it's really just, addressing the why behind the immune system, dysfunction.

So it's just fascinating to me. You have to be a detective. Exactly. You have to be a detective and be able to solve all kinds of problems. You know, there's an interesting fact that most people are not aware of autoimmune diseases are the number three cause of death in the United States.

Number three, now they're hidden because it's Hashimoto's and it's lupus and it's Crohn's and so on. But when you take all of the autoimmune conditions together as a class, it's the number three cause of death.

This is how important dealing with autoimmune diseases is. And this is one of the reasons we are doing this focus. So fantastic. So, what what is your approach to an autoimmune person?

A person with immune disease. Yeah. So when somebody comes to me either with a diagnosed autoimmune condition or having just a lot of symptoms, that made me question like, well, is this autoimmune in nature, right?

Because a lot of people are not diagnosed, they're suffering with symptoms like, on average for about seven years before they get a diagnosis of something like lupus.

So it's just kind of like there for so long causing this, this, dysfunction. So we really just take a step back and start with a good health history, figure out timeline of when did they start to notice things, what was going on before that point?

Because we know the dysfunction that leads to ultimately the destruction that leads to the symptoms happens, you know, years sometimes before the symptoms appear.

And then the symptoms are they're usually years before the diagnosis actually happens. So there's a long timeline of events that we have to kind of trace back and try to figure out, well, what was going on around that time that caused this switch to happen in the immune system, where it started to think that self tissue was this harmful foreign, substance.

So we look for we look for different stressors in the body, whether it's physical, mental, emotional, chemical, and we just we get a good thorough history.

And then that leads us to figuring out what types of tests we should run to get some more concrete answers as to like, what dysfunctions and and what level of dysfunction is happening.

Is it just basic cell function that's off of the cells not working, and that's what's leading to these other, bigger organs systems not working as good.

Or they're just simple nutrient deficiencies. Sometimes it's really the simple things that are off because some of these diet is poor, they're stressed out all the time.

They're not sleeping, they're not exercising. So that's where lifestyle medicine really comes in. Because the things that our body experience, on a day to day basis are what matter the most.

And those are the things we have control over for the most part. Right. We have control over our diet and our lifestyle. So we use those as the tools to fix what's going on, and we can help people understand what they're doing and how it's impacting their health.

So it just starts with getting an idea of where they're at, what are they doing, what are the things that could be causing some of this dysfunction in their body as a whole?

And then doing some the right testing to really get answers. So we're not just throwing darts and guessing what's going on. We're understanding where the dysfunction is happening and why.

And that's where we we start with everything. That's key. And I think one of the things we have to try to figure out is if you can clinically, what we try to do is remove the cause, because if you could remove the cause, you can cure the problem.

Right. It's a continuing cause. Right. So how often can we remove the cause? And what are the causes of autoimmunity? Yeah. So a lot of times the causes are self-inflicted and we don't even know we're doing it.

So, eating a standard American diet, they call it the sad diet for a reason, right? It's very inflammatory and full of processed foods are really are low in nutrients.

So a lot of times it is nutrient problems or absorption issues like if somebody has gut problems, the whole thing of you are what you eat is only partially true because you are what you can digest and absorb, and you are how your body is reacting to that food.

Right? So, that's why food is such a powerful tool, because it has so many different ways that it influences our

body. So sometimes it is the diet, sometimes it's the lifestyle.

People just don't know how to handle stress. We're overloaded with stress. And stress is not just mental emotional like a lot of people associate it. Stress is like physical stress, like even having a sedentary lifestyle is stressful on the body, right?

Not sleeping well is stressful on the body. So stress is so many different, different things. Having hormonal imbalances, having toxins and chemicals, exposures to things that just overwhelm the body's response.

Finding root causes and common triggers

And, and these things, all directly can trigger, trigger the immune system to be more hypersensitive and, like, more alert and more likely to perpetuate something like an autoimmune process where tissue in the body is being destroyed, destroyed, because it gets the body in the sense of it needs to be on high alert.

Things are coming at it and stressing it out, and these are potentially harmful. So we put the guard up. And that's part of what happens with this whole autoimmune process, is that there's so many different stressors that are coming together to create this response.

It's not just one thing I've never actually worked with the patient where it was literally one thing, and all they did was change their diet and everything got better.

It doesn't work like that. There's a lot of layers to the to these issues. So, yeah, I think it's just looking at, their diet, looking at their lifestyle, looking for key areas of, that might have dysfunction.

Blood sugar problems are super common, hormonal imbalances, like with cortisol and the adrenal glands and how well your body is able to adapt to stress and that resilience factor.

I think a healthy body is a resilient body. It's able to overcome the little challenges that it it gets exposed to easily and, you know, be able to compensate.

But when this, this these problems are going on for so long, the ability of the body to be resilient gets worn out and we can't overcompensate for these little, little dysfunctions which then get magnified into these bigger problems.

So that's why little nutrient deficiency, like having a vitamin D deficiency or iron deficiency matter so much, because now the body doesn't have key ingredients to be able to function, like to keep the immune system balanced.

We need those things. So just again, looking at where in that person's lifestyle do they have control over these things, their diet. And just it's personal.

And that's where I think that's one of the, the biggest benefits to functional medicine is that we look at the individual instead of just looking at their label that they've been given.

And we can tell that, you know, every person with a, with lupus, for instance, is going to have a different presentation and different, past history and exposures and diet and lifestyle and like, they're going to have different things that we need to work on.

So there is no magic diet, no magic exercise, no magic pill. So personalization magic, cure. In other words, no magic removal. So like, for example, if you live disease is a perfect example, right?

You get Lyme disease. You may have gotten Lyme disease, you may have a mild reaction to a lot of disease. And then but a lot of disease, chronic Lyme disease is an autoimmune problem as far as I'm concerned.

Right. It's no longer the infection now it's an autoimmune problem. Right. So everything you're describing is what you need to do to help with maintenance.

But you set yourself up for something like Lyme disease. You might not set yourself up for it. Right? Unless you are a hiker, you're setting yourself up because you prevent giving yourself the opportunity to have it.

Otherwise it would. Lyme disease. We see some people who have Lyme disease and recover it and they're done. They're gone. Right? No problem. And yet the next person with Lyme infection, even though it's a mild infection, all of a sudden, has this horrific reaction and lifetime stress and distress from this condition.

Right? Okay. So it's not not always chasing the Lyme disease. And I see this often that people will chase the Lyme disease forever and ever and ever. I got Lyme disease.

Wow. But you got lost in the forest, right? It's a it's not a line forest. It's an autoimmune forest. The Lyme disease is one of the trees in the forest.

So you can never get rid of that past. It's there, it's gone, it's gone. And so it happened already. We see this with, kids, usually young people with type one diabetes.

So type one diabetes is an autoimmune disease, right? Yeah. So you don't have to have had anything. You could be very healthy. All of a sudden you get strep, all of a sudden you get, repertory viral infection, a simple virus, right?

A simple flu like virus, not even influenza, but a flu like virus. And then, bingo, a month later, you're type one diabetic. So what happens there? And so then we work with the immune system to figure out, well, one, why was it more susceptible to have such a big reaction to a simple virus, where other people get exposed to the same thing and can fight it off?

What is missing in the immune system, maybe that was was compromising them from being able to be resilient against it, to fight it off. But also looking again at like, what other factors are there that are influencing the immune system at the same time?

Because it could be the diet and they're not sleeping and they're stressed out. And so there again, there's a lot of things that maybe weren't the direct trigger, but they were under the surface kind of contributing to allowing that perfect storm of events to happen where then their body couldn't overcome it.

And that's what triggered that response. It wasn't just the virus, it was all these other things that kind of led to it. Right? So the immune system was already weakened.

For all these other factors, you may have the genetic predisposition, the gene type right, to get type one diabetes in the first place. But not everybody with that gene type gets type one diabetes.

Right? Right. So something happened for you that you got triggered and activated by that particular infection. Normally you might not have. And the next time, if you had it before, you might have had it multiple times before and never had a problem.

But now this time all of a sudden, bingo! Now you have the condition. Yeah, right. So then you have, you know, it's not just it's not just genetics, right?

A lot of people will just assume like, oh, it's just genetics, but it's how our genes are influenced by our diet and our lifestyle and just experience and how all of those things come together.

Well and that's what that's epigenetics right. Not the genetics of being a woman or being a male. It's not the genetics of blue eyes and brown eyes. It's the genetics of what your system has to do to deal with whatever environmental challenges are placed on it.

Yeah. Right. Then it manifests in whatever ways it's going to manifest. Exactly. So part of the predisposition is actually relate to one of the things that I'm sure you look at is to test it, go back to testing.

So if somebody first presents like this, what I would normally do is to go back and find out if they had, immune deficiencies already, because if they already had immune deficiencies, when they get their condition, then they still are there.

They're now part of the problem. Right? They were they were the cause or participating in the cause, but they're still part of the problem because now you become vulnerable to other things as well if you don't deal with those basic immune issues.

So how do you deal with that? So looking for again what is what is the cause of the immune deficiency. Maybe they do have low vitamin D levels are good at the iron level.

Things that help with the T regulatory cells of the immune system. I like to think of the immune system more like this balancing scale that needs to be worked on instead of just a straight.

It's it's upwards down as a whole. Because typically there is an imbalance towards one side kind of you make certain, cells more than others, maybe it's a 1 or 2 type of deal or just more, antibodies are being produced.

Your natural killer cells are a part of that. What we think of as a weak immune system when you don't have as many natural killer cells, you can't easily fight off those pathogens that you get exposed to.

But in the middle of balancing out all of the different like sides of the immune system are kind of orchestrating everything we need key components like vitamin D and good.

If iron and omega threes that help with the T regulatory cells, part of everything. So a lot of times that's where those deficiencies, that's what we'll look for because it's just the immune system doesn't have the key ingredients to function.

How is it going to do that. And sometimes it goes back to, like I said, cell function. If the cells don't have what they need to be able to function, how is anything else going to work so well that could be blood sugar, could be thyroid related nutrients, receptor problems.

So testing is is really helpful. Say that you're not just guessing and kind of just throwing things at the immune system because you don't want to push it the wrong way either.

That's what can be problematic for some people too. It can. It actually can exacerbate the immune response. I used to, a long time ago. I read some papers.

A doctor in the Netherlands did a study on families who had, kids with a lot of infections, upper respiratory infections. And he discovered doing these pedigree analyzes in his practice.

And it was all based on his actual practice. And what he found is that people with blue eyes and blond hair were much more likely to have IGA deficiencies.

So they came with that genetics because of their blue eyes and blond hair. But I imagine in the Netherlands and Sweden and so on, in the Nordic countries, that's a very common issue.

So that blue eyes, blond hair go with certain genetic predispositions. And very often they ended up with IGA deficiencies. So what does an IGA deficiency lead to?

Well, just with again, any imbalance, of the immune system matters. So whether you have too much of something or not enough or something, it's it's, important.

The IGA is more like that first line of defense, the immune system. That's how I think of it. Right? It's the first thing that will, that, external factors will come into contact with, whether you're breathing them in or you're ingesting them or the getting on the skin.

It's those barriers to, the body that it get exposed to the outside world, that that's where the IGA reaction really like lives. And so if you don't have those protective barriers there or the immune system has been run and you don't have those immune cells, you're are more susceptible to things, being able to get in and not have, a way to fight them off as effectively.

Yeah. IGA found is, in the mucous membranes of the body in particular. So that's the first barrier of defense, as you say. That's the first first, thing you're going to encounter.

Then the body has to produce IGA antibody to fight the viruses or the fungi or the bacteria, the molds or, or even the food that you're taking in. Right.

Immune deficiencies, testing, and treatment pitfalls

And if it doesn't have that capability that you have to find other ways of dealing with it so that you don't keep stressing that system. Yeah. Because then it will just be weaker and weaker, and then you really have no protective mechanism that spreads to other parts of the body.

Right. The tonsillitis fight last night itis and maybe even encephalitis sinusitis infections often are related to IGA deficiency. And you don't have to be hugely deficient with IGA.

It could be mildly deficient as well. And it's probably pretty rare that we actually see really serious severe IGA deficiency. Right. I usually see just severe deficiency for somebody that has been on like, a lot of immunosuppressants for like a long period of time.

That's where I usually have, some of those things pop up. It's just it's more medication induced for a lot of people. What kind of immunosuppressants would you say do that?

You know, I see people that are on a lot of prednisone. A lot of times the steroids are a really common one. Right. Yeah. So that's actually like one of the biggest.

And then there's so many different ones out there now that they're using for rheumatoid logical conditions and just anything that is made to just simply suppress immune function.

I see have has negative impacts, especially when somebody is on it for long term and unfortunately conventional medicine by using these immune modulating agents.

Right. That's all they do, whether it's prednisone or the the other DMA demands, they cause other problems, right? Because they're suppressing the immune system in other ways.

And what do they do to actually stop the progression of the condition? I don't know, right. They're just putting a bandaid on it. And actually causing, I think, more imbalance of the immune system.

Again, if we think of it as like a balancing scale, instead of just shutting down an overactive part of the immune system, it shuts down everything, so that weak side already becomes even weaker.

And somebody, you don't have any other supports, right? So you don't have other other aspect of your body trying to balance keep you in balance and stop progression, right?

Yeah. I like your self, as an MD, I did all the terrible things that FTC did and, and do. But when I started doing functional medicine, I'm starting actually working with functional questions and functional problems and making somebody actually function better rather than trying to stamp out a disease, because the concept of most medical, medicine essentially is to tap out infection, do an antibiotic, you're done.

Right. But we know that if you do, what is it? Antibiotic due to an infection. Yeah, I can make things worse. And it makes other, other problems pop up if you're killing off some of the good stuff too, right.

That as well. But an antibiotic, all it does is kill off the bacteria. Oh right. Right. What does it do to the rest of the body? As you say, it can cause new problems, but it doesn't actually help the body heal itself from the infection.

The damage caused by the infection is not being healed by the antibiotics. So we have this we have this crazy perception that give an antibiotic I'll be just fine.

And you know I used to tell patients all the time when the doctor, when you leave the doctor's office with a prescription, the doctor goes like this mentally or otherwise.

Right. Good luck. I mean I hope it works and I hope you don't have problems with this. Yeah. See you in six months. Exactly. So what you're doing is basically just leaving everything to chance.

Here's your here's your treatment. Cross our fingers. You and I will say, okay, we have this problem. Let's figure out why we got in the first place. Number one, because that we support you so that you don't get it again.

Right. And then we support you to heal better. So when you have surgery, right, when you have a lesion caused potentially by a broken bone or, appendicitis or needed needing to take out your gallbladder, what do you do to help the body repair?

What are the surgeons do? They don't do anything but they do this right? As as you said. Okay, I cut you, I cut you open, I suture the wound, I got rid of your appendix.

Go home and he'll come back someday. Cross out, cross your fingers. Yeah, right. We don't we don't we don't sit for that. You know, I don't feel good with that.

That does not. It's it's. Yeah. It's something that I need to understand why it's happening to to be able to feel good about helping somebody. I can't just send them away with the.

The fingers crossed. Well, we do some of that too, but, you know, still. Because no matter what you do, it's still trial and error for a person. You never know how they're going to react.

But at least the tools we have, for the most part, are supportive. I rarely saw reactions to the things that we do in functional medicine. Right? Right.

Rarely do you see a problem working with the body instead of against it. I think that's one of the big differences, especially when you can do a proper evaluation of a person, not a disease or a condition, but a person.

Right. Exactly. So what kinds of what, what are your favorite autoimmune diseases to work with. Yeah. I'm fascinated by a systemic autoimmune disease because it's something that is so invisible a lot of times like lupus.

Right. It's something that somebody can, they can present with, with just a skin rash that's, you know, visible or something, or they can just present with, kidney dysfunction or they can present with, just different things that, maybe are not, so obvious.

And I think it's, it's fascinating because they're, they're puzzles to figure out. Well, how is this all connected with all the different things that they're presenting with, especially when somebody comes in.

They have not been diagnosed with something like lupus yet. Right. And they have all these different issues of and all of these different specialists.

Nobody can figure it out. And then we just sit down and start talking about, wow, I think all of this is actually connected. And it's it's fascinating. The things I see.

Oh, really, really commonly though are like Hashimoto's where it's organ specific autoimmunity too. And people usually, you know, come and seek out specific, specific help for that.

And but like rheumatoid arthritis and, and lupus, they do work with like a medicine, you know, psoriasis, just different different things. I they're all so unique, but at the same time also similar.

I feel like I ask a lot of the same similar questions for a lot of patients just to try to boil down to, how is this, how do we treat your immune system instead of what you're presenting with?

And the symptoms? So there there are there are algorithms, right? It's not a single algorithm. It's not a single set of solutions or supplements that you do every single time.

Right. So you do your assessment and you say based on that assessment, then you develop a plan. Do people follow your plans? They do. I mean, we we work very closely with the people that we choose to work with.

So not everybody is a good fit. They're not in the right mindset to like, change their diet or work on their lifestyle when we first meet with them. But that's a lot of what we do is we coach people through how to make those those changes and we keep them accountable.

We have a great health coaching team, too, that we work really closely with people. And, I think a key that really helps our patients succeed is we educate them along the way on why, what they're noticing, how to pay attention to their body, why those things are happening, and then what are the things they're doing that are contributing to those problems so they know how to do things differently, and we teach them new ways to balance out their lifestyle and new ways to feed their body and with nutrients, and using food as medicine.

So education piece is so, so huge. That's what I think it's really makes our patients so successful as we help them understand all of that. Yeah. I think this is where medicine, conventional medicine, is horribly lacking.

When you have 12 minutes with a doctor. Right. The solution is to get you out of the office as fast as possible. Right. You asked two questions. That's it. All you get is two questions, and then the doctor says, here's your prescription.

What? You got to go. So they don't they don't deal with education, information support and so on. So what we do in functional medicine, you have to spend the time to be able to do all the things you're doing because you're not going to get better if you don't do all those things.

So I don't know about you. I should tell my patients I'm not your doctor. You're your doctor? Yeah, I'm your consultant. I'm going to help you to learn how to be a doctor for yourself. Right?

Yeah, yeah, do it for you. We can only tell you how to do it. Exactly. So I came up with an expression. Over the years, you can lead a horse to water.

Then you start an IV. And that's what we saw in medicine, right? Because they fail with what you do with what you normally do in medicine. And so what you have to do your left hand with big guns, you're left with the bad stuff to intervene.

You start an IV. Yeah. Rare. We rarely start IVs. Yeah, right. We don't need to because people are doing what we suggest that they should be doing to take care of themselves.

And what we find, I'm sure you do, too, is that it's fun. You see results. People get better and they feel better, right? Right. Yeah. And it's motivating.

You know, when you when you're starting to feel better, when you go from just feeling so tired and in pain and just, like, feeling pretty miserable all the time when you start to even get a glimpse of like, oh, wow, this is what it feels like to feel normal.

And when you just start to feel better, it's it's motivating. So a lot of people that are resilient to that change aspect of, oh, I got to change my diet or I gotta like, change my lifestyle.

Once they start to see the benefits of it, it's it's life changing. It really helps them like see the other side and it's it's motivating. And I know as a patient, when I first started out, that was the same thing for me.

It was it was so hard to change my diet the first time an elimination diet was brought up, I was like, nope, not going to not going to go there. But, it was huge for me.

So I, I get that in. But yeah, it's it's cool to really see the big differences that can happen relatively quickly for people. I mean, we can usually start to see people feeling better with within a month or two of just focusing in on them and what their body needs.

It's cool. Yeah. And even within a week, even a few days, I maybe if they have a gluten sensitivity, if they have a strong gluten sensitivity, you get them off the gluten.

If they do it well they do properly. Right. Because they don't cheat. Yeah. Get them off the gluten. I mean the next day already they're starting to feel better.

Yeah. That's motivating you fast. Yeah. What about the family?

Stress, adrenal function, and remission

We always try to get family involved because they're either the support system or the sabotage years. And a lot of times people are the sabotage without knowing that they're sabotaging.

They're like, oh, but ice cream makes you feel good. So I'm going to give you ice cream, right? And so they think they're helping and they think they're being supportive.

But we always try to get family involved when we're having to do diet and lifestyle modifications, because it's really going to matter, right? There might be food triggers in the house, stressful situations that just, you know, set them off.

So when we involve the rest of the family and understanding, hey, this is what we need to do. And this is why we need to do it. And this is how you can help the person that makes a world of difference, because they're with those people way more than they're with us.

Right? And they need that accountability and support system with the people that they spend the most time with to or that they rely on significantly. So, for example, if you got a guy that let's be sexist here, you've got a guy with an autoimmune problem, but his wife is the cook.

Right, right. You don't need to teach him. You need to teach the cook. He has to be willing to work with the cook. Right, right. But you need the two of them together.

So I used to always try to get patients to come to see me when we as couples. Yes. Or as other family members. Right. I tell people that between my wife and I, we have a brain.

Yeah, a whole brain partnership, right? Yeah. And there's a different way of looking at things. Right. So you really do need to involve the the support team in that particular family.

And if you don't, that is doomed. Yeah. And unfortunately we see a lot of younger patients to kids popping up with autoimmune problems and stuff. And so then they rely on their parents.

And so just educating everybody that's kind of involved, it's is really helpful. So what are some of the triggers for autoimmune diseases and what are some of the triggers not only to initiate autoimmune, but also then to keep it going.

Yeah. So initial triggers can vary greatly. Like I think of it as like how much stress can the body handle before the

last straw comes along? And usually what we think of as like the trigger for autoimmune, what actually like set it off in the first place was just that last straw.

There was already a lot of things kind of built up under the surface. And then it was that perfect time and storm of events that trigger day. So it could be like an infection or something, right?

Or an emotional trauma that happens or something like that, where that's where they started to notice a change. All of a sudden it could be something like menopause, right?

But, the things that are under the surface are more of what we deal with. Because again, once there's like an infection that triggers something, it doesn't mean that that infection is still the thing we have to go after.

Like wine is a great example or Epstein-Barr or something. Usually it's it's these other factors that people are contributing to in their daily life. So they're not sleeping, they're not exercising, they're not recognizing stress when it happens and doing something to effectively stop that stress.

And so they're living in fight or flight mode all the time, which shuts down their digestive tract and makes them not absorb nutrients properly and causes microbiome problems.

And so it's looking at, all the different stressors that the body is experiencing, whether it's physical, mental, emotional or chemical. And under our and, rooting those to help them understand how do they rebalance their diet and lifestyle to fix those problems.

And so it's just it's again, very personalized. But looking at we do a lot of, just blood testing can give us a lot of information. We do stool testing, we do saliva testing, just different, different ways to get the full picture of what's going on.

We can't just rely on one type of test. But even then, when we kind of sit down and do a health history and I'm sitting together, sitting with somebody for at least over an hour just to learn what's going on with them.

And then we can figure out, well, what type of testing is actually going to be helpful. So then we're not doing a million different test either. So it's all personalized. But those are common things that I look for is just what is causing the stress in the body.

Is it the diet? Is it the lifestyle? What factors in there? Are the biggest things that that person needs to rebalance? What are the most frustrating things for you and the work you do to that limit your ability to, get results?

Compliance is really frustrating. I mean, like, but we really do work with, when I'm sitting down with somebody, that's one thing I really get a sense of is how committed are they?

How how educated are they to begin with? Maybe they just are. They're not quite there mentally to be able to dive into making changes in these places that are going to make them successful.

So we're kind of picking and choosing what the patients that we bring on if they're not quite ready to to do that yet. But it's a lot of times life circumstances that come along that throw people off, so they go on a vacation, there's holidays, you know, they just they don't know how to adapt to those situations where they don't have a lot of control.

And so teaching them different ways to have control over those situations. Hey, bring your own food if you're flying, you know, bring snacks and have plenty of water and like, you know, just make sure you're stick to your sleep schedule.

It just kind of educating people. And again, what can they be doing to, to make these new habits something that just becomes natural to them, which takes time.

But just how do we get that into their daily life? Because that's where people fall apart, is when things are changed and things are not, you know, expected or whatnot.

Yeah. I think one of the, one of the frustrations as well is dealing with other voices. I call it. Right. As we sort of touched on that a little bit. You got other members of the family have other opinions, and especially if they're scientific or medical. Yes.

Right. Or even their own doctor and start wants to put them on prednisone or, or they're married and you say wait a minute, wait a minute. Hold off. Here are the risks. Here's what you should do otherwise. Right.

So that's a frustration too. And it's a constant battle too. And too many chefs in the kitchen definitely make it challenging. Yeah. Too many voices. Like you said I try to decrease all that.

So you talked about stress. So stress is a like a huge factor. How does stress impact autoimmune disease. That's again what the types of stressors affect the body a little bit differently.

But one of the big things is cortisol. Cortisol being naturally a very anti inflammatory hormone that the body produces. And it helps regulate our sleep cycle, our energy, our blood sugar.

It really helps with keeping some balance in the, in those systems. And when stress becomes chronic that's when it becomes a problem. So where our bodies are made to adapt to acute stressors, things that come along that it should be able to just deal with and then move on and kind of go back into homeostasis and parasympathetic response with the nervous system.

But when that stress is just chronic, it leads to more inflammation and it leads to dysfunction. It's like it wears out our systems. It makes us so we're not as easily adaptable and resilient.

And that's where these major dysfunctions really stem from is just our body can't cope for so long. So the stress could be, chemical like hormonal imbalance that's happening, blood sugar problems happening, nutrient deficiencies, microbiome issues.

So just it's when we think of stress, stress is not always a bad thing because it's actually what helps us heal or repair and grow and like, it's a good thing.

But when it's chronic stress, that's where it becomes or overwhelming or overwhelm ING stress exactly too much. It's the body just can't compensate anymore for it.

What about the adrenals? You said obviously stress causes adrenal, increased cortisone production by the adrenal glands. What about, cortisol deficiencies?

Yeah. So that's something that can again happen over time when the body's just been under so much stress for so long, you just you can't keep up with cortisol production.

So that's where a lot of people also notice they're, chronically fatigued. They can sleep for ten hours and wake up not rested. They just, they're having problems with their blood sugar, with other hormones.

The body just can't heal and repair because we need cortisol as a healing mechanism. Something else that I'll see happen really commonly. A lot of patients deal with anxiety, and I feel like some of that anxiety is directly related to how dysfunctional things like cortisol are in their body.

When the adrenals are not able to keep up with the cortisol, they'll also produce, adrenaline, right? Fight or flight. Right. That's kind of. And then we go into that response.

And when we're constantly in fight or flight mode, that, changes how our nervous system responds to things, but it also changes our immune system response to things. Right?

It's more we have to be more on high alert if we think we're being chased by a tiger. So everything, all the lights kind of go on and, and, it can definitely flare up an autoimmune condition because the body can't get out of that vicious cycle that it's in.

When there's chronic stress, that's always there. Do you have to have Addison's disease? You have a problem with your cortisol production? No you don't.

And I'm really, I've only seen, a handful of Addison's cases over the years. It's really not as common in my practice at it anyways. It's just, adrenal, not insufficiency down to the point of, an autoimmune disease like Addison's, but it's just, fatigue or dysfunction.

I call it more adrenal dysfunction. Right. It's functional problem. It's not a structural problem. They still have adrenal glands, right? It's they're just that function is being, suboptimal, limited.

Yeah. And again, this is an issue with conventional medicine. They do a test for it that basically is they understand a Addison's disease. I think it's also extremely uncommon.

So doctors don't even normally think about cortisone, insufficiency. Right. So what you do a cortisol curve, what you have to do through your analysis, typically in order to get an adequate samples, you don't have to be horribly depressed.

You don't have to be Addison's. You don't be flatlining. Right. One of the most fun things I got used to do in my practice was that they help people who are flatlined.

Yeah, put them on some, cortisone replacement. Cortisone replacement. So it's a prescription, unfortunately. But you put them on course. A replacement the next day.

They're like a robot arm. I mean, seriously, it's just like that. Crazy. So you have to figure that out. And so sometimes it's just reducing the stress.

As you said, sometimes it does require a prescription to beef up adrenals that are no longer capable of producing the cortisol. Right. What are the what are some of the most common things besides chronic stress that cause adrenal insufficiency?

To cause adrenal insufficiency or just insufficiency? That's a good question. I don't really see that very often in terms of, like, full. Are you talking about Addison's?

No, but. Well, Addison's is zero, right? It's almost zero. Almost flatlined. But you're three quarters of the way down. Say you're only producing, a quarter of what you should be producing so that that's still adrenal insufficiency.

Yes. Okay. But what are the most common causes of adrenal insufficiency is EBV? Why? Because it and there are viruses that are basically neurotrophic that they attack nerves.

And the adrenal gland is a nervous tissue. Okay. And so you could have fatigue, chronic fatigue. You can have chronic stress, which obviously lowers the threshold because again you're starting on a lower threshold anyway.

But then if you if you have EBV attacking your adrenals then you you can't recover by doing natural things. You do need more support than that. And sometimes a prescription is necessary, but you can't stop the other stuff either, right?

To do all the other things. Yeah, there's definitely the time and the place for like medication intervention. Like some people really do need to get out or something like that, you know, before you can move on.

And the lifestyle, dietary things are enough to help them. You do need to have those intervention. Sometimes you don't want to put more straws on the camel's back.

Right. Exactly. Is remission possible in autoimmunity. Yes. Remission is cure is a difference. Yeah. The find that difference. Yeah. So remission. Well we look at it as is.

It's not an active problem anymore. Is it. Still something that can come on later. You can flare it up. Yes. That's part of what we do. And and when we're working with somebody with autoimmune conditions is educating them on what are the things that can flare them up so that knowing that in the future they can avoid the flare ups or be able to quickly recover from the flare ups if they do happen, if some life circumstance kind of throws them into that or something.

So remission is just the start of getting the immune system back and back into like homeostasis, having the body function more optimally. So that that autoimmune destruction process and inflammation that was, happening causing the tissue destruction is not happening anymore.

Right? It's it's kind of, it's in remission. It's in a, in a non-active state, versus like what we think of with the word cure. Cure means it's gone. It's never coming back.

That that doesn't happen. Right? A lot of a lot of what's happening with the immune system in an autoimmune, situation is that there's these memory cells, the immune system produce it.

It's always just going to be able to, recognize those self tissues as being something that's foreign if it gets triggered to do that. So it's and there's no cure for autoimmunity, but remission is absolutely possible.

We see that all the time. So control and remission is not not a cure but control and remission. You can't turn it off. What has been turned on. You can't turn it off.

Right. Just control. And unfortunately, the control mechanisms that medicine uses are by themselves significantly risky, like steroids, for example, chronic steroids create what kinds of problems?

Yeah. Well, that's one of the things that could wear out your adrenal shield, you know, like the steroids and the cortisone or I've seen some people go the opposite where they're just their cortisol levels are through the roof all, all day.

And that stresses out the body too.

Magnetic field therapy for cellular repair

But again, I think it's just that balance of all the it's homeostasis in the body. Right? The balance of the different parts of the immune system and, and, how everything comes into play with that, that those medications don't take into account what's going on in the person, in those individual levels.

It's just kind of trying to suppress everything. Yeah. And then you get things like osteoporosis, even short courses of steroids, especially in perimenopausal women.

Then it can have significant impact on bones. Okay. Again, if you don't do the natural thing, you know, the, the functional medicine things, you're basically relied on something that's not going to help you in the long run to get into remission.

Right? Right. And staying in remission takes a lot of work too, which, you know, again, another, difference between like curing something and getting it into remission.

If it was cured, you wouldn't have to continue to do all the good things to help your body. But we know that the body needs need support. And so you do need to learn what those triggers are for you so you can stay in remission once you get there.

Again, a big emphasis is on, education, education, education, education. Yeah. So what since this is the PMF

summit, what, what role do you see potentially for magnetic field therapy in autoimmune?

Yeah. It's a really, like, faceted dating topic. Again, I look at, autoimmunity as it's not just, you know, the tissue that's being destroyed as the problem.

It's this mechanism of causing the immune system to not function. And where a lot of that stems from is cellular dysfunction. When the cells are not healthy enough to work, they're not producing energy, they're not able to detox themselves.

There's this chronic inflammation that happens that's all stressful on the body. So I think one of the biggest benefits of, something like PMF is that it really helps with cellular health and getting the body's innate immune system back on board so that the body can, you know, essentially clean house and get rid of the toxins and get the cells to be able to get nutrients.

And so they can make energy and they can heal themselves. And it starts at a cellular level, which cells need, energy. They're, you know, they are, energy substances.

We are energy. So we're influenced by magnetic fields and it's it's fascinating how again, kind of going down into, the, the basic foundation of health is where I think a lot of these therapies help the big picture of, like, getting towards a remission and autoimmunity.

Well, you're actually correct. And I that's the way I look at it as well. Is that magnetic field therapy because it passes through the body completely magnetic field does not stay in the body.

You can't stop a magnetic field. The body can't stop the magnetic field. It can't use it up either. It's passing through. It's going to pass through no matter what.

I describe it like the wind blowing through the trees. Yeah, you can only if you only tell what the wind is. There is wind there because the trees are moving, the branches are moving, the leaves are moving.

So a magnetic field, the body's like a tree to the wind of the magnetic field. And as it passes through, it stimulates charge and energy production in the body.

So it wakes up. It just wakes everything up. And almost everything that we do nutritionally and magnetic fields can't repair something that doesn't have the ability to be repaired.

You can't build a house without bricks and mortar. You need the ingredients. They need the supplies. You need the the components to actually construct something.

So if you're deficient, then you have to improve that deficiency. And then the body's got the the equipment necessary to now be stimulated to produce healing, repair those tissues.

So a big part of our immunity is again tissue damage or so the inflammation that's there, it's caused by the immune process, damages the tissues, causes swelling, edema, inflammation and so on.

So you have to control that. So everything that we're doing with nutrition and functional medicine then is latticed. It's basically a stacked. And often again nutrition becomes the base the foundation.

Right. Then you add the magnetic field therapy and you're stimulating the repair processes of the body as you said. Then you're amping up the natural level of, health and the body takes care of business.

Right. Because our body is trying to find the best balance they can find in the presence of imbalance. It's a good, good example is you're trying to run with one leg.

What do you do? You get a prostheses so you can run, but you're not going to run as well as you would if you had

two legs normally. Right. So you you're adding you're adding to the other processes that need extra help.

But they're augmenting it. So pmfs decrease inflammation dramatically. My wife broke her left little toe, some lawn furniture swelling, bruising. Right. Pain.

We started magnetic therapy on her, portable, small, portable, machine. She worked 24 seven. So this was midday. The next morning, she woke up. Swelling is gone.

Rosie's gone. Pain's gone. So what do you do with a for a broken toe? Buddy, tape it. Right. You put them in a platform shoe and elevation. I could use ice, right?

Rest. Ice elevation. So, but all we did is the magnetic therapy. That's it. Padded platform room with a body tape. Next morning, she woke up. Swelling is gone.

Frozen is gone. Pain is gone. She did it for another. Another day. 24 seven. Continuously 24. Seven. The next morning she woke up, walked a mile in shoes, continued for another 24 hours, and then walked three miles in tennis shoes.

And that was the end of that. All right. So that it decreases inflammation. It helps with repair and regeneration. So the combination then with everything you're doing you can't do magnetic therapy cannot replace what you can't what you don't have.

So you have to have the basics there as well. And you still have to assist with the process. And there are people who are selling magnetic therapy devices that say, all you need is eight minutes a day.

What do we know of the repairs in eight minutes? Like? Nothing is that fast of a turnover. All right. And so on. On my website, Doctor Polycom, I have a blog about inflammation and identity.

So pmfs increase adenosine, but they also stimulate the adenosine receptor, which is responsible for chronic inflammation in the body. And. But you need the right dose, the right intensity magnetic field.

So you need a 15. Gauss is the opposite. So gauss is a measure of magnetic field intensity gusts. And you need 15 gauss at the neutrophil. And what you to go.

To the site of inflammation. Where are they in the body. They're everywhere. Everywhere. Exactly correct. So then if you need 15 gauss at the neutrophil that you need to dose the magnetic field appropriately for the for the location that you're trying to stimulate for the inflammation.

So if you have inflammation happens to be in your heart, if it happens to be in your lungs, if it happens in your kidneys or in your brain, then you need the right magnetic field intensity to be able to deliver the 15 gauss at that target tissue.

So I don't you probably don't know a lot about radiation therapy, right. But what do you how do you figure out how much radiation therapy you need? What's the dose depending on the tissue.

No, it doesn't matter. Tissue doesn't matter. Matter tissue doesn't matter. It's the depth that matters. So if you, let's say use that 15 dose example, if you need to deliver 15 gauss at that tissue and you know, they make the radiation field gets weaker and weaker and weaker as you get farther from it.

And you have to, calibrate your dose right at the very beginning to deliver 15 gauss below. So, for example, if you want a treat across the brain to have inflammation in the brain for brain fog, encephalitis post post-Covid syndrome, you got a concussion.

You got to treat across the brain. So let's say that six inches how strong is that magnetic field need to be on one side of the brain to go all the way to the other side?

Then you're going to need about 4000, 5000 gauss, and most of the whole body magnetically. Versus the little pinky toe. Right? That's right. Like my wife's toe, that 200 gauss did the job really well.

No problem. But for that kind of distance, you need, you know, again, you have to use the appropriate system for the problem that you're dealing with.

And most of us with autoimmunity, here really should be optimizing the whole body, right? Not just not just along. If you have a lung problem because the rest of you is going to put a demand on your body to if you keep everything else happy, then the part, the part that's really, really problematic is going to be a benefit.

And even more. Do you have any questions? No. So you use, the PMS, like do you have people do a daily for autoimmune conditions? How do you typically do that?

So, that's the preference. Now obviously in the practice setting, you can start off with helping people in the practice setting and do a short course at treatment.

But most chronic conditions like autoimmune conditions are lifetime. So they're better off with home treatment. So again you can start it in the, in the home setting.

Let me, pose this question to you that I've mentioned many times. I think in the summit, how many cells do we have in our body, like trillion, 30 trillion or something?

About 100 trillion. And the estimates you read how to treat and how many biochemical processes happen per second. And so thousands. Exactly between 2 to 5000 biochemical process per second in every cell in our body.

Crazy. Amazing. It's absolutely amazing. So how often should we treat. And as often as you can that's the problem. So I so that's that's really the answer.

As often as the body says I need to they did a study with, fractures, nonunion fractures, fractures that will heal. That's not autoimmune, but if a fracture doesn't heal, that's a disaster.

So after not after six months for a fracture hasn't healed. It's called a nonunion. Well, they these people were given devices that are FDA approved to heal non unions that are above 16,000.

But most of these fractures tend to be pretty superficial. So $16 could work. But they found that you needed to do ten ten hours a day of treatment. Every day.

To heal those fractures. And the people who. And then they surveyed people 170 people who had these devices use them. They found out how much, how many hours a day they were using it for the ones that that did, nine hours a day or more healed probably about three times faster to heal the bones.

So if you did three hours a day only of treatment, it could take you six months to heal. Right. So people are afraid of magnetic fields and think that they're going to cause a problem, but magnetic fields going through the body so they don't cause a problem because they're different than cell phones, different Wi-Fi and so on.

So they're much they're almost completely safe. So sometimes you need to do as much time as you need to do as you said, right? In order to get the results that you need.

And having the right magnetic field and having the right piece of equipment. So consultations can become very important. Somebody who's an expert at magnetic field therapy to guide you into the right, piece of equipment, people like yourself, you know, should be able to say, okay, this is the kind of equipment that you need for this problem, and this is how you're probably going to have to use it, you know?

Thank you. So, anything else you want to say that we didn't cover? Now, I think, like, the key things when it comes to autoimmunity is figuring out the individual's stressors.

What do they have? Control over? And then using those things as, as their tools to be able to help give their body what it needs to be able to heal and repair.

So the tools could be food, could be stress management, could be sleep, could be exercise, could be PMS. Like just finding all of the filling up your toolbox with as many things that can support, healing, repair and just optimal function.

And it's different for every person. But remission is, not only something that is obtainable, but it's something that you can really learn how to stay in as well.

So, there's, there's so much that you can do for autoimmunity. I and I hope that anybody listening that's been told otherwise starts to think of things a little bit differently and has some hope that, they don't have to deal with the symptoms and medication management and all that fun stuff that they kind of get stuck in, in that realm. So.

So I'm glad that you're why do you keep doing what you're doing? I love it, I love being able to see people change their lives. It's like, that's what keeps me going.

I just get so excited when somebody comes back and they're like, feeling like themselves again for the first time. It's like, I know, people that are feeling better are more productive, they're happier.

It trickles into so many other areas of their life. I feel like if everybody is just happier and healthier, the world is better. So I wanted to have that little piece of helping people understand that.

I totally agree with that. What percentage of your patients, let's call them patients? What percentage of the people who visit with you who actually do what you suggest they do?

Because if you don't do that, then, you know, I don't know what you can expect in terms of benefit, but those who do, what percentage of them get to that point of remission are being really, feeling really good, would you say, or just feeling really good 100%, if they're being compliant, you know, 95% are the people that are staying in remission because they've really taken that information and made it something that is sustainable long term for them.

And they really get they understand how to do that. I mean, really, if you can give people that education piece, then they can, that can go a long way.

So, I mean, that's huge. I suspect that if you already had a 10% success rate, you wouldn't keep doing this right. I guess. So that's the reason I ask the question, because I you we are both pleased that people actually get better.

And that's one of the things that happened when I started doing functional medicine to, people got better. I never saw that as often when I was doing conventional medicine.

I was never did people get better. So this is amazing. They get better if they. But they have to follow your advice right? And do the right things. Yeah. So we're successful.

You're very successful in autoimmune. I know you are. As long as people are willing to do what they, they need to do. Right. And it's a partnership. You know, we we help people with that.

It's not something that you can a lot of times just easily do on your own. You need to understand it's more behind it. And that's what we're really good at doing, is helping people put those puzzle pieces together and explaining it to them in an easy way so they understand it. But they got to put in the work.

So it's a partnership. And we, like you said, you can can lead the horse to water. You can't make them drink. You can't. You know, I, it's just got to work together.

And, I suspect as well that, whoever you help. As you said, it trickles through in other parts of their lives. Family

members also begin to do all these things that they're supposed to do, and other family members start to be very healthy as well.

Exactly. Do you charge more for success? We should know. We're just happy to to get that feedback of, oh, I made my husband do the elimination diet with me, and now he's lost 20 pounds and he's off his blood pressure medication.

And as I love as I'm getting up so I know it's it's wonderful to say, isn't it? We make big differences. Well, I know you make a big difference. I really thank you for making a big difference with us and sharing your wisdom and knowledge and experience, and I look forward to working with you again in the future.

Same. Thank you. And thank you for for doing this summit. I think it's really a fascinating topic. I think, it's more and more people need to get educated on it and to really seek out help from experts like you with the PMS.

I think it's it's awesome. I think, your work is is really helping people. So thank you for what you do our our work. All right. Thank you, thank you.

Have a good day.