Introduction to MCAS and Root Causes

Welcome back to our reversing mast cell activation syndrome and histamine intolerance summit. I'm your host, Dr. Meg Mill And today I'm joined by my esteemed colleague, Dr. Sunjya Schweig Just showing who is a physician with 30 years of integrative and functional experience, he's committed to advancing a data driven approach to the prevention and reversal of chronic illness.

He's the founder and president of the California Center for Functional Medicine. And today we're going to talk about the different root causes of mast cell activation syndrome and what you can do about them.

So I am so excited to dive into this conversation. Thank you so much for joining us today. Sunjya Thank you so much. It's a pleasure. Great to be here.

Well, it's great to talk with you. And I know you have a lot of experience in treating me, so I'm excited to get into some of the different dynamics that we're going to get into.

You and I were talking a little before we got on air, and we have great things to share with the audience. So, let's just start by talking a little bit about what you see, how MCAS starts to play out in a lot of your patients.

Yeah, absolutely. So, first of all, for everyone out there in the audience, I'm glad you're here, and I hope that you're finding some valuable information and that this is helping you to kind of put some of the pieces together for what I expect.

you know, some fairly complex chronic health issues that you may have been struggling with or a family member may have been struggling with and trying to, you know, investigate, put the pieces together.

And I know that it ends up being the case that you, as the individual out there really becomes the, you know, the seeker and the searcher and trying to find this information.

So I'm glad you're here, first of all, at the summit. And I hope you're getting, you know, some of that information that can help you. I also want to acknowledge it's probably feeling pretty overwhelming for a lot of people.

And just in terms of like, gosh, all these different things, I think about all these experts, all these directions and, you know, so I always tell people, you know, just take it one step at a time.

And, you know, I think that's a really important framework in general when folks are struggling with mast cell activation or more illness or, you know, Lyme disease, tickborne infections, co-infections, viruses, you know, all these pieces, mold, etc., all these pieces, you know, cause this really complex signaling in the body that, it's like a really complicated ball of yarn and you end up trying to figure out how do you tease this apart and how do you where do you start, and what do you do if you get side effects?

And how do you know you're on the right track? And, you know, so we see in our practice that that mast cell is very, very prevalent. You know, I was looking at some statistics and I think that, you know, in practices like ours and you know, similar probably a lot of folks out there in the audience, you know, up to 75% of people are struggling with some degree of of what could be attributed to mast cell activation.

Right.

Gut Dysfunction and Immune Confusion

And it could be either, you know, a genetic predisposition that the person had and then their body sort of

accumulated a load over time, whether that's environmental toxins, heavy metals, mold, you know, or tick bites or other insect bites or viral exposures or stress or trauma.

I mean, all these things, right? They all they all play into this, this, this load that I think of it and it's almost like we're accumulating barnacles over time.

And, and after a while, our body can't handle it. And then you start to mount symptoms. Right. And so the mast cell activation could be preexisting, or it could be, you know, something which got potentiated as this load increased over time.

Yes. Yeah. No. And I see that regularly that there often is the trigger. And, you know, I think what's so interesting about it too is that people aren't able to always identify when you're just moving along in life and the symptoms started and your, you know, getting worse and worse.

And then sometimes when we go back through the history, it's so enlightening when you can pinpoint, oh, wow, I did have a tick bite or oh wow, that I did, you know, start to I traveled somewhere and came back and was very sick.

And you know, where they start to put some of these connections together and can really see as the how that load build up over time. Yeah. Or the exposure to a water damaged building that nobody ever really dug into and kind of pulled out the timing on it.

Exactly. And you know, it also it's just so interesting. Right? Because when you think of these different illness clusters, you know, you know, whether it's Lyme and co-infections in one bucket or more than one bucket or mast cell activation in one bucket, or there's more nebulous kind of, you know, orthostatic intolerance pots, celiac, you know, as a bucket, you know, the symptoms in any of those buckets look very, very similar to the symptoms in any area or any of the other ones.

Right? So I think for you and for me and for a lot of us as the clinicians, you know, we end up trying over time learning like what are the patterns and what, you know, do we suspect might be more due to a frank mast cell activation problem compared to mold or Lyme as the trigger?

And, you know, we've really, really leaned into, mast cell activation and mold really heavily in the last few years. And I think they're really important because I think that, you know, unfortunately, it's not uncommon to have tick borne infections, you know, but dealing with massive activation coming down that side of the immune system, dealing with mold and the inflammation that it generates and the immune confusion that it generates, because both of those things, mast cell and Mold generate a lot of inflammation, a lot of immune confusion.

And it's almost like we're in this, you know, cytokine storm that, the body can't figure out. And, and that is an environment that the bugs love, right.

That makes them very happy. And they're just kind of like going about their business. They can they can hide out. They can use this complex immune confusion to evade the immune system.

And so a lot of times we're seeing like, okay, let's deal with that inflammation and immune confusion piece first. and then or simultaneously at least and then we're really interested in like, okay, that might be actually moving the needle better in terms of our treatments, in terms of how quickly people get better.

And then in terms of when we do get them better, you know, what's the risk of relapse, right? So like, what's the risk of things coming back? We call it the dismount when you're treating, you know, Lyme or co-infections.

Like sometimes it's hard to stop the treatments. People get the symptoms coming back. And so I really think, you know, and that was a big area of passion of mine early on with treating the gut and diagnosing the gut properly and being aggressive about parasites and pathogens in the gut.

And and we still are very, very aggressive with that. We do a lot of gut testing. again, just trying to to down shift that immune confusion and downshift that barrier dysfunction.

and so I think that those are really important parts of the big picture. yes. I also see the gut playing a major role in all of that. So though it's a good place to start looking. Yes.

Yeah. And yeah. And testing aggressively like we do a lot of times we do Sibo testing pretty routinely. We do, you know, Genova stool testing. We also test very frequently with small company in Arizona called Paro Wellness, which is really the best test, in my opinion, that we have available for finding bugs.

and so, you know, they, they definitely show more pathogens than the average stool test. And, I do trust it. I think it's accurate, and I don't think it's necessarily giving false positives, because when we do treat those bugs like RDA or Cryptosporidium, you know, Blastocysts the interesting bug, it's it's a little on the fence there in terms of how aggressive to be about it depending on strains.

but yeah, crypto is very, very disruptive. And we do see some really, you know, interesting benefits on treating those. Yes. And there's a lot of theories of getting the parasites out first because they're underlying a lot of times too.

yeah. Yeah. Absolutely. Yeah. And the gut obviously is the center of the universe when it comes to the immune system. And so, you know, if you're trying to calm down that immune confusion or, you know, testing and treating the gut properly, again, really starts to shift the terrain and set you up for, you know, a better foundation, as you know, you know, if you have got barrier dysfunction, you have increased risk of autoimmunity.

You have, you know, particles coming in and triggering the immune system that there shouldn't be. And then, you know, with, you know, intestinal permeability, you also then have brain permeability, blood brain barrier permeability.

You get other other barriers to start to break down. And, you know, can lead to a lot of mood and anxiety and cognitive impairment and neurosis symptoms, etc..

Yeah. I think that's something with all of the intestinal permeability talk that has been going on for years and years now.

Tick-Borne Infections and Lyme Complexity

The blood brain barrier is finally catching up, that there's blood brain barrier permeability too, and that you're getting some of these neurosis symptoms also because I think people disassociate that sometimes.

Yeah I agree and I agree I agree with you. That's a that's a good call out on your part because I remember I've been doing this for, you know, 25 plus years.

And I remember, you know, in the beginning it felt like, you know, talking about gut pruning ability and talking about leaky gut, you know, was it was unscientific.

And it was like, if you if you never mention that to a mainstream physician or, you know, specialized, they'd be like, you know, that's that's kind of woowoo and, you know, but now it's been totally proven out.

And if you go to PubMed and you type in intestinal permeability, you get tens of thousands of articles, you know, on all different topics. But I agree with you.

I think that next step of the blood brain barrier disruption as a result, is still a growing concept that you know, a lot of us know about it. but, you know, educating, sort of reverse educating the mainstream system about that is still, is an upward, upward hurdle.

Yes, yes. Well, so we're so we definitely look at the gut and I'm right there with you. That's, that's step one for me too. And then, you know, we mentioned let's move a little bit into the tick borne illnesses because I know that's another thing.

Like when you're saying that you have this homeostasis and maybe sometimes your body's fighting them and then something comes off balance, like you get mold or a, you know, mycotoxins or something and everything comes out.

And I know there's, you know, a lot of different approaches there. We've talked about in the summit some of the ways to get testing, you know, how the regular testing is and accurate that they can come in.

But I'd love to talk. I know your approach is more botanical, and I'd love to get into some of the ways that you do deal with that. And then even some of the differences in the tick borne illness, cause I know everyone's heard of Lyme, but that's not the whole picture.

Yeah. Yeah, absolutely. You know, we talk about Lyme disease. I think that that's sort of a, a big concept that everyone, you know, has probably heard of for the most part, but it's sort of lumped together with, you know, maybe more of like a syndrome.

Right? Like maybe Lyme syndrome. And people don't appreciate the nuances of what we're talking about, you know. So we're presumably talking about Lyme disease.

That's that's infection with, bacteria called Borrelia burgdorferi, which is a sparkly bacteria, super, super smart bacteria, very capable of evading the immune system and becoming a persistent infection.

And so it can hide out and, you know, continue to, play the sort of cloak and dagger game with the immune system and cause inflammation and, you know, multi-system dysregulation.

And so similar to syphilis, it was said by Sir William Osler that to know syphilis is to know all of medicine because of all the different things it can do and all the different body systems that can be involved.

And so Lyme is really, you know, the syphilis of today in that regard. It's, you know, less I mean less clear how much of a sexual transmission piece there is.

So that's a little bit different than syphilis. there's some debate there. but it hasn't really been proven out by research. but it definitely is very similar in how it can cause almost any symptom across any body system.

And so, so specifically, Lyme disease again, refers to the brella, a Bergdorf. Right? Bacteria. Now ticks are what we think of, you know, nature's dirty needle.

They're going out and they're feeding on a bunch of different animals, over the course of their lifespan. And so they can accumulate pathogens. And so you can also have the beaks species in there.

You can have Bartonella species, you can have a Alicea and a plasma. You can have rickettsia, you know, you can have, fungal organisms. You know, there's a whole there's viruses like Powassan virus and bourbon virus and, you know, you know, tick, tick borne relapsing fever.

But really, I Miyamoto, I, you know, so there's a whole list. There's a whole list of sometimes up to a thousand different pathogens in one tick, unfortunately.

So it's a little scary, right? you know, but but each of those can have different symptom pictures. Right. And so Bubka, for example, can present with, shortness of breath and cardiac symptoms.

And this is kind of how I got into this field. Originally, my wife was exposed to Lyme disease. And Bubka, when she was in grad school, we were living in upstate New York, in Ithaca.

I'm at Cornell, and she was doing her master's degree in natural resources and ethnobotany, became botanical medicines and out in the field trips through the forest.

And nobody ever said anything about ticks or Lyme. And, you know, she was she, she presented with, what we now know was an acute bobcat infection. So heart palpitations, chest pain, new onset murmur, shortness of breath, anxiety, you know, and so, you know, and unfortunately, similar to many people out there, you know, wasn't tested, didn't get, wasn't mentioned in the workup across multiple specialists and you know so but bobcat again caused those cluster symptoms also night sweats so drenching night sweats.

It's a it's a malaria like pathogen. and so in addition, you know, Bartonella is a very common bacteria. And and there's Bartonella, there's a couple it's a few different strains that we know of.

We can test for a number of those, you know, but there's probably, you know, at least 100, if not more different, Bartonella like organisms which are behaving similarly but maybe haven't been fully characterized or identified.

And, and Bartonella can be passed by a tick bite, which is less talked about in the research literature, but it has been documented. but it also can be passed by other biting insects, very common insects such as fleas and lice and, you know, sand flies, etc..

So, so those are a couple Bartonella, you know, can cause a lot of neuro sex symptoms that can cause a lot of joint pain, especially large joints like shoulders, hips, knees.

I can cause, pain in the bottoms of the feet, you know, in the morning. That's a common symptom. Ask people about, It can cause, you know, sore throats and, like, brain fog, etc., you know, and so then on down the list, right, so are licky and rickettsia and, you know, some of these are actually potentially lethal within their first few days, like earlier in Rickettsia, Rocky Mount spotted fever.

You know, these can kill you within a few days. And and actually, it's interesting because licky and rickettsia are kind of why doxy is the frontline treatment for Lyme disease.

it's actually not the best drug for Lyme. It has some coverage, but it's bacterial static, meaning it will kind of like push the pause button on the bacteria.

And it's not it's not for Lyme. It's not bacterial side. I mean, it doesn't necessarily kill it unless you go up to high, high doses. but it does cover Alicea and Rickettsia, which again, are potentially lethal.

And so that's kind of like why okay, you got a tick bite. Here's your doxy and off you go. Right. So and some of the other viruses are also very dangerous.

And, you know, especially in the short term, you know, so really what ends up happening is that you get this, this highly microbial infection and potentially, that many of the bugs don't show up well on our current diagnostic tests.

Right. So we still run them, but we're still, you know, grain of salt. The initial Lyme test is really only accurate, about half the time or less. So it's kind of like flipping a coin, right?

You know, and that's how we how we speak of it. especially early on. Right. And so, you know, really ends up being, you know, going by the symptoms, going by the what happens when you treat it.

What was the response rate. and but, you know, really requires a lot of pattern recognition and a lot of, of, experience to, to kind of walk people through, you know, this, this murky land, you know, and then also, like we mentioned in the beginning, you know, if they have, disrupted baseline or disrupted gut or they have, a lot of inflammation, you know, we see trauma playing into this early childhood trauma.

So whatever load they're bringing to the current moment, then sort of also, has an effect on how their body responds to this new load. yes. Yeah. And you're using botanicals for your treatment approach.

We use we use the full spectrum. So we use all we use antibiotics and we use canticles. And similar to a lot of Lyme, and, and chronic illness practices, we, we try to avoid the antibiotics if we can.

but if we do use them, it does tend to be sometimes longer courses or higher doses. And you know, really what my, my theory is like if you give someone a treatment and it helps keep going.

Right. And if you give someone a treatment it makes them worse. You have to then analyze okay. Is this a side effect. Is this an adverse reaction or is this a reaction.

Is a die off reaction. Right. And then you're also a little bit of a fork in the road is a reaction to the bug. Or is this, is this more of like a mast cell stir up that's happening which can happen when you when you kick up the inflammation in the system.

But we do use a lot of botanicals. And you know, I would say in an acute tick bite short term someone just got exposed. They have an arm rash there. You know.

They know you know, we know about the possible exposure there. They suddenly became ill, you know, new onset in that case, we're very aggressive with antibiotics, and we really do, you know, jump in because you have an opportunity there to eradicate it and to cure it and to prevent them from going on to having, you know, chronic health issues, which is the goal, right?

You know, there's just so many hundreds of thousands of people who get exposed every year and, you know, probably 70 to 80,000 who then go on at least, you know, conservatively, to go and have chronic symptoms, right, so we can jump in and we can eradicate it, then, that is a win, you know?

But if we have someone who comes in and they've had, you know, chronic health issue for a number of years and they've seen some other practitioners, they've tried some different things.

You know, in that case, I will always start with hormones and adrenals and gut and then move towards botanical treatments. yeah. Because the botanicals are super, super interesting in that they are they just have so much, so many different, mechanisms of action.

Right? They can be directly antimicrobial and be killers. Kill the bugs. but they can also be immune stabilizing and they can be anti-inflammatory and they can be mast cell stabilizers and, you know, adrenal harmonizer and tonics and you know, so and when you put different plant medicines together, they can synergize with each other and their different, you know, phytochemicals, you know, can really boost efficacy.

And so, you know, it's really, a network effect in that, in that case. And, you know, so, so I, I really do love working with botanical medicines and, we'll try to prioritize those in cases, you know, again, this is an individualized discussion with each person.

but, you know, I find that while we're working on all the other pieces and getting somebody, you know, sort of tuned up and getting their system back online, the botanical medicines are nice also, because you can start lower and you can ramp up the doses gradually.

And so you have more of a, an ability to titrate and individualize, whereas antibiotics, because of resistance issues, you really have to jump in and stay on a certain dose.

If you go under a certain dose, then you risk, bugs being able to get smart to it and become resistant. so yeah, there's a lot of different reasons why I find my botanical medicine is really wonderful.

And, you know, we were really honored to be able to do some research. We published several papers in collaboration with Johns Hopkins, and this was funded by the Bay Area Lyme Foundation and, you know, looking at some of these botanical medicines.

now, it's really important for me, for everyone out there, these, these these papers were really well received. I think it generated a lot of excitement in the field, which is also very gratifying.

but it's important for me to have people now that, you know, these papers were in a test tube. Right? So we can't exactly make the jump that if this botanical medicine showed efficacy in this study in the test tube, that that means that we put it in our bodies and it's going to do the exact same thing.

Right. Because it's a big difference between an isolated test tube system versus this amazingly complex network effect that happens in our bodies. but but on the other hand, you know, all of the remedies that we chose for those studies were we chosen because people are already using them in this field. Right.

And so we knew that people were generally tolerating them. We knew what their safety profiles are.

Botanical Treatments and Mast Cell Stabilization

They've been used in multiple, you know, in indigenous cultures for, you know, thousands of years, you know, the IRB, crypto lapis, for example. you know, that had been anecdotally, it's an anti-malaria, herb that's been used in Africa.

and people then here in the US and in Western cultures for this illness picture had adopted it for babies. Yet because of the similarity between BCA and malaria.

And so then what we were able to show in the research where that botanical medicine was actually in the test to carry out, was also active against Lyme and Bartonella was really interesting.

Right? Because all of a sudden now we're like, wow, okay. You know, this is just a really, really powerful medicine. that is being used is is relatively safe.

And, and so that definitely for us and for I think a lot of practices and people out there probably did shift a little bit and how broad they were using that, that medicine.

Yeah. That's wonderful. I know it's all it's that's very exciting. I like how you pointed out that in the test to do versus reality, everybody's very complex.

But that's a great that's great powerful research. Yeah. Thank you. Yeah I know it's important to point that out because people just, you know, if they have medium or not, strong even understanding of science that you see that they okay, this is going to kill alignment and Bartonella and take it.

And so it's always important for me when I give talks about it to, you know, so basically the next step on that is to is to try to defund and generate animal research and human research, which would be, which would be potentially, you know, maybe we can show, efficacy in humans, which would be, you know, but in the meantime, you know, we're people are using it.

We're using it in our practice. and so anecdotally, I feel like it makes sense. And these things, do we really help a lot of people? We and you made another good point too, with the antibiotic versus the botanical, that you can actually increase the dose and go slowly.

And with people with mast cell activation syndrome, that's often important because there is such a high sensitivity. So actually dose dependent, you know, sometimes you even have to microdose until you can get to a place where you can tolerate.

Yeah. That's super. Yeah. Yeah. That's a, that's a really powerful, characteristic of, of the treatments that they were able to do that. you know people with mast cell activation that's, that's quite severe I think of like their, their immune system is just really twitchy, very trigger happy.

And so it's kind of basically, you know, these mast cells are going to die granulated. They're going to dump a lot of their cytokines and mediators and histamine.

And you know, at any provocation. Right. It can be it can be a shift from hot to cold. It can be stress. It can be, you know, pollution. It can be more obviously all of this the things we talked about.

Right. So you know, they're they're they're very like trigger happy. And so being able to in these more sensitive folks, being able to do things slowly, do things one at a time, be scientific about it.

is really important. Yes. Yep. That's wonderful. And the next thing I'd love to talk about our viruses, because, you know, a lot of people will think, oh, well, I had a, you know, mono.

And so that is something I'm going to have to live with. There's nothing I can ever do about that. And sometimes people when we're looking at viruses, just think, okay, I've had this.

A lot of people have the Epstein-Barr virus. but can we talk a little bit about how that adds to the load and things we could do for viruses? Yeah. So I think it's and this is an area that's become really just much more discussed and much more understood since the pandemic.

Right. Because that was sort of like the mother of all viruses. And also we showed, it really incredible connection between Covid infection and mast cell activation and Pots and orthostatic intolerance and all these other immune triggering.

Yes, that can happen. Right. And so that really showed the power and the ability of a virus, you know, potentially to directly stimulate, directly activate and upset the mast cells and create a significantly worse inflammatory picture.

And that's obviously with, you know, we think about Covid, it's both a new exposure for a lot of people. But then it's probably also now, or it is also now, chronic exposure, meaning some people don't clear the virus as well.

And so that can linger and create similar to all these other infections, this ongoing low level inflammatory triggering that the immune system can't figure out and then starts to spin and spiral out of control and get more trigger happy.

Right. So Covid is a really important there's the amount of research that has been done and the amount of discussion has, you know, there's obviously a very tragic, you know, situation with some people who lost their lives.

But I think there's also been a real upside in terms of the research and our understanding of these complex chronic illnesses and the synergy of, you know, what happens with me, CFS, what happens with life, what happens with EDS.

And I think the other conditions are sort of getting looked at in more detail and trying to understand, wow, these actually are real, right? And they are.

There's something going on which we didn't understand before, but now we have a little bit better look, a little bit better view into some of the underlying physiology.

So so that's one side I think if you want to think about, you know, Epstein-Barr or herpes six virus or Coxsackie virus or parvo. So a lot of these viruses, you know Epstein-Barr is a classic basically, you know, we've all been exposed by the time you're 18, 95% of people have been exposed to Epstein-Barr, and some people had mono right, in high school or college, and they knew about it.

And some people never knew about it. It just was a cold or they never were symptomatic from it. Right. But if you test people, most people have antibodies.

And once you've been exposed to the virus, it doesn't go away. Right? It's just there in the background. And most of the time, our immune system can just keep it in a box and keep it locked away.

but if things start going sideways and if that cytokine soup, you know, starts to get, you know, more and more, you know, up to a boil, the vaccine bar is happy to come out of his box and join the party, right, and start to cause some mayhem, as you know.

And so fatigue and cognitive issues and, you know, and so what we look at for testing on that except the the antibodies aren't super reliable. Right. Unless you have like an AGM, which is the more short term, sort of newer antibody to, to the BCA.

the viral capsid antigen, you know, but most of the time you test if you just have IgG, which is an older exposure could have been any time in your lifetime.

but we also do test the Epstein-Barr early antigen, which is a better marker. It's not perfect, but it's a better marker for reactivation. we see that high in a lot of our patients, right.

And then and then you can do PCR testing on a lot of these viruses, like, like herpes six virus, which is also connected, potentially to any CFS. They've been doing a lot of work on that over the, over the last few decades at Stanford, a couple decades, Doctor Jose Montoya was one of the first researchers looking at that.

you know, so but we don't have tests to say they're reliable to say is, is is is virus really active right now or not? So we basically run the antibody levels and just kind of look at how high it is.

Right. If it's lowish then we're like, okay, maybe that's not the main driver. Right. but if it's higher, you know, it potentially could be a driver. And the analogy I like to think about, and I learned this from Doctor Montoya, actually, is that, you know, it's like you're in a car and those things are all there, right?

So they're all passengers. But we're trying to figure out, has it shifted from being a passenger now to being a driver of the symptoms? or what is its role in the hierarchy of that person's illness?

And so a lot of times, you know, if those do show high, you know, we can do the antibodies. You can also do PCR testing, which we haven't I haven't found really reliable, you know, so if the antibody levels are high, you know, we might add on some botanical medicines or even prescription antivirals, to try to, to try to get those levels back in check.

Yeah I love that. That's a great analogy of the car. They're all passengers. But which one's the driver right now. And it can change right. Was driving for some of these strokes.

That chronic illness is actually maybe it's better that maybe it's like a bus right. You have the passengers. And maybe I also like that analogy, honestly, because sometimes the driver will switch.

Right. And so sometimes you'll be doing one thing. You'll be treating whatever it is. Not so lime, you know, you know, a lot of times this happens with the tickborne side too, where you'll, you'll start with one area and and and again, it's almost like my, my colleague Wayne Anderson, taught me this cause he said, you know, it's almost like your body will.

These things are really good at evading the immune system. So your body will work on one. Let's say we're working on lime because we decided that was the top layer, and now you're getting some control of it and you're making some traction.

The person's feeling better, but then all of a sudden something might shift and they might see that coming. They're like, wow, he's doing so much better.

But now I'm doing worse again. And this other picture is happening. It's almost like you were in like a wrestling ring and, you know, you started to get kind of a control of this one.

You know, person or virus or bacteria that you're wrestling. And once that happens, then the other one might just

come up behind you and like wacky over the head and you turn around and your music kind of turns around and tries to then deal with that one, right.

And meantime the other ones goes off and starts to regroup a little bit. So it's very complex. Yes, yes. And it's a journey. I would say it's one of those situations, you know, when you're looking at something like this, that you're looking at the it's a journey, not a race.

And I think that that's an important thing to keep in mind. Is super, super important. And, and for for those out there listening also, what I get really passionate about is that it is a journey.

and it's overwhelming. You know, it can be exhausting. It can be really scary, for just so many reasons. And people can drop out of their lives and, and school and work and social and, you know, friends and family might start to question you and not be sure, you know, is it just you you look fine.

You know, white. Why don't you look sick? You know, you it's hard to there's nothing on the surface that shows the presence of these issues. And are you just making it up and, you know, so practices like yours, practices like ours, you know, we deal with this day in and day out and we know it's real.

And we believe people and we have tools that are available to us to do a deeper dive on history, a deeper dive on testing, deeper dive on treatments. And, you know, it's really like a very, collaborative approach.

Right? And so what's really important for me, for everyone out there is, you know, understanding that it's going to be overwhelming at times. but also understanding that there's help out there and that you can access it and, you know, learning from, you know, lectures and from some important.

Understanding they have bad days and and, you know, it's really important to just keep searching for the answers that you need to get better. Yes. Yeah. Thank you so much.

That's really important to say because now, as I know, so many of us have personal stories that brought us in and that that was one of the biggest things for me when I was going through all of this.

It was my own personal health journey that brought me to functional medicine. And I was not, you know, going and not getting the answers and being told like, you're fine, you look great even by physicians, and you're trying to get these answers and no one will listen to you.

Nervous System Rewiring and Closing Remarks

And it just be it's there's psychological components. You know, you are you feel so isolated. So thank you for sharing that. Yeah. Yeah. I'm sorry to hear you had struggles, but I.

Yeah I know it was a journey but but but I you know it took you it took a while for me to really get my health back. But I was able to get to do so. And I think that's what makes me passionate about sharing that with others too.

Yes, absolutely. One of the other things we have, I know at the beginning of the talk you were talking about, you know, we're working on all of these things, and I think that's the most important is finding all of the root causes.

But while we're doing that, we're also working on mass stabilization in and in kind of alongside of, in nervous system rewiring and all of those things as part of we do share some of your favorite mast cell stabilizers and what you do there while you're kind of working on all of these other things in a more, deeper way.

Yeah. So that's a, also very, integrative approach, meaning pharmaceuticals over the counter, as well as some current prescription, along with a lot of botanicals, and supplements and nutrients and, and then also the lifestyle piece.

Right. but we really like the H1 and H2 blockers, right. So, you know, Claritin, Zyrtec, Allegra for H1 and then

Pepcid slash promoting for H2 we use a lot of talking.

We use a lot of gastro chrome, you know, and singulair sometimes, which we have to be careful because that can have a significant side effect of depression.

So be careful with folks with that. That's the generic name for that is Montello cast. and so, you know, other than that, you know, sometimes, we'll really move into more of the supplement side and, you know, so things like quercetin that quite high dose is 1500 milligrams three times a day.

curcumin, vitamin C, magnesium, resveratrol, you know, Dow enzymes, you know, working on the diet and, you know, decreasing triggering in the gut from, from fermented foods or histamine loaded foods.

you know, and there's other products which have things like the, the old colon and route in, in them. milk thistle, can be super helpful. picnogenol Perea seed and another one, that we can really use.

Yes. There's a lot. I'm grabbing them off. I don't want to overwhelm people. Yeah, yeah, yeah, there's. A lot of options. And, And then always, you know, getting to the underlying triggers.

While we're doing. You know, and not to undersell, we've mentioned a couple times, but like, you know, the brain side and the vagus nerve side and the neuroplasticity side, you're going to hear a lot of people talking about that at the summit.

I think there's a very better recognized, phenomenon that that you can actually go in and modulate the brain, you can modulate the nervous system response.

And, you know, because the immune system is talking to the nervous system and the brain can be on fire. And when I tell people to ask them to look at these programs and make sure that they're doing breathwork and they're meditating and that they're doing neuroplasticity training, I want I want to point out and sort of plant, flag in the ground that I'm not at all telling you that it's in your head or it's your fault or, you know, hey, you just need to go get therapy and that's going to fix everything.

So it's not we're talking about this is really a therapeutic modality that goes alongside everything else that we're talking about, from the testing and the treatments.

And the reason is, is that, you know, a lot of times we're doing these tests that we're giving people supplements or medications and we're sort of putting stuff in them from the outside in hopes that that helps rebalance or helps fix things.

But you can also do work from the inside, and you can get the body and the nervous system and the cytokines to calm down by rewiring the nervous system and getting that crosstalk between the nervous system and the immune system calmed down.

And so they really are bi directional, right? and so they're really, really powerful for both. And you're doing breathwork also, you know, a lot of people have disordered breathing or disordered airways.

So, and, and that can cause a ton of inflammation and a symptom picture that looks a lot like all these other things. Right? So balancing your oxygen, balancing your CO2, can have some direct, scientifically proven, you know, downstream benefits that, frankly, we're not going to get to where the pill.

Right. And so it's just so all these things go together. and before we got on, I was actually just having that exact conversation with someone I was working with and was saying that there wasn't those exact things because we have to be doing those those things.

And often, especially when we're having the mast cell issues, we have to be doing those things alongside all the other things that we're doing. It's such a key element.

So thank you so much for bringing that up. And you've been you've provided us such wonderful information. Can you share with everyone where they can find you?

Sure. Yeah, yeah. We're the California Center for Functional Medicine. we do provide care nationwide, through telemedicine. And, you know, the website is ccfmed.com there you can find our social links.

And, you know, we have we're really, really passionate about trying to crack the code a little bit on. So everything that we've talked about today, I think people are probably feeling overwhelmed and from the summit in general.

Right. So we're trying to crack the code on how do you help people integrate all of this, and how do you give people the support that they need? And I think that that is both practitioner base.

So we think of it as high touch with, you know, clinicians and health coaching and nutrition and the right admin support. But we also think of it as high tech. Right.

So we have this whole opportunity now with wearable devices like the Aura Ring or you know, data dashboards and gamification and you know, now we're moving into this whole phase of AI and medicine and the opportunity that that's going to bring to bridge the fabric of the office and the person at home and give them a little bit more contact with some of the information and the content.

This is a really exciting time, and I'm really optimistic about the potential for us to better help people. but yeah, we're we're out there if people want to take a look at us.

Right. Well, that. Yeah. So that's exciting. We're on and we're on the verge of a lot of new technology. So I definitely will follow along with what you're doing.

Yeah. And if folks are coming to, the Institute of Functional Medicine to the annual, international conference, we'll be doing a panel there on wearables in AI at the end of May.

So that should be fun. Oh, great. Yes. Well, thank you so much for joining us today. Yeah, it's my pleasure. Thank you so much for having me. Thank you. Have a great day, everyone.