Introduction and guest overview

Hello, everyone. My name is Doctor Richard Horowitz. I'm the co-host of the Doctor Talk Killing Lyme Summit 2.0. It's my great pleasure today to introduce you, my other co-host, Doctor Mariah Hinchey.

We're going to be talking today about the use of lifestyle and botanical medicine in the treatment of chronic Lyme and other vector borne diseases. So thank you for Mariah for joining us today.

Great pleasure to see you again. Always a pleasure to see you and talk with you. Thanks for. Coming. I mean, a lot of naturopathic doctors, right? They're doing a lot of great things out there.

But you specifically specialized in Lyme and vector borne diseases. Why? Why did you take the approach? I mean, for me, it was one of the most important things anyone could ever do.

It's a worldwide epidemic. What brought you to this field like? Because naturopathic medicine, of course, we need naturopaths with what we're doing is internists and the rest.

But but why Lyme? What got you into this? So honestly, I was forced into it. I mean, there's no other way to put it. So, you know, being trained to get to the root cause of the patient's symptoms. And, you know, I used to say being in Connecticut, you know, being at ground zero.

But let's face it, lyme's in every state, it's in almost every country. I mean, so I don't want to give people the wrong impression by saying that. But more often than not, I had patients coming in that had atypical this, atypical that, you know, as their diagnosis.

And, you know, to me I'm like, wait, ding ding ding. Like that means they don't fit the diagnosis, which means that's probably not their diagnosis, you know?

And they're not responding, in the way you would expect them to respond to, like, let's say, their psych medication or their pain medication or their, you know, GI medication.

And so, you know, I was just always really trained to get to the root cause and to and to go deeper, I think some naturopathic physicians are kind of taught to trade, you know, herbs for prescriptions or nutrients for prescriptions.

Why Lyme and vector-borne medicine

And I just wasn't trained that way. I was very much trained that there's always an underlying cause, and you're not being a good doctor if you don't find it.

Right. So I found myself, often finding a vector borne disease as one of the underlying causes. And to take a step back, you know, I was fortunate enough that one of my patients in clinic when I was still in medical school, which I just realized this morning was 20 years ago now that it's 2025.

But she had chronic Lyme and BBC and, you know, in school we weren't taught anything more then, you know, maybe some fatigue, joint pain, rash, 14 to 21 days of doxy cycling and bam, like you're cured.

And that is it. That's all we learned about Lyme disease. So having this young woman, she was like 20, in her 20s, and she was walking with a cane and her cheeks were bright red and her ears were white bread like, she had lymphocytes and all of these symptoms.

She had been on Ivy road and for over six months, all of these things and like she still wasn't better. And that was

just really eye opening for me. And, I worked with one of my favorite teachers, Doctor Zan Perone, and we did a lot of Chinese herbal medicine with her.

We were doing fever treatments, peat baths, you know, this whole detoxification and immune strengthening program. And so I really say I was fortunate enough to learn in school, in clinic, that a what they teach us about Lyme disease is not correct.

And B, you know, a lot of the even outside of the box antibiotic treatments do not cure this disease. Yeah. So you came about it almost in a similar way that I did, which is you know, I don't even remember at this point because I don't even want to tell you how many years ago my med school was year 20.

I think, I think mine is coming on 40. That's like 43 years or something like this. But but the point being, for me, it was the same thing. You know, I don't remember root causes.

And mine was a seven year medical program in French. I mean, they really went into great detail. It was just like, but I think we all kind of come to the, you know, the same conclusion after a while, which is and by the way, and I think this is the difference and, you know, God bless you for doing this.

The reason I think patients come to you so often and you're so well respected in the community, is you care and people know when practitioners care. It's not just a question of how smart you are, it's a question of how caring you are, right, what your knowledge base is, and the fact that you're not going to quit right until you get to those underlying sources today.

And part of what we're going to discuss today is like, okay, you've now have this chronic vector borne patient who's coming in with all these symptoms.

What is your main focus? Where do you start with these patients? To try and get them better. Yeah. So I mean, obviously we have to deal with the infection.

You know, it's an infection. But I kind of look at it a little bit different. So we all know that this infection causes massive inflammation. You know all of the symptoms that a patient experiences are literally different.

You know expressions of this inflammation whether it's pain or it's cognitive disability or GI whatever. Right. So it's these inflammatory cytokines that actually break the immune system is how I explain it to patients.

So it causes this this imbalance of the different T helper branches of the immune system, as well as really creates like immuno incompetency. So it's like the body knows there's an infection there, but it lost its ability to know how to fight it and how to see it and how to get to it.

And so my ultimate, ultimate goal is to restore immuno competency to the patient's body and rebalance the immune system. But you got to deal with all of the inflammation to do that.

And as you know, you can imagine with all of the body sort of and all of the cells being inflamed, they you end up with other damages to the terrain. And so it's like you know, different organ systems stop functioning properly.

You know, we talked about a lot of this in your interview and with your 16 point, and since questionnaire. Right. Like it addresses this stuff. But it's like if you have, you know, increased nuclear factor, kappa beta degrading the tight junctions in the gut and now you have increased testing all intestinal permeability, and now you're leaking in, you know, toxins along with undigested food particles that your immune system is now seeing as antigens.

And that's creating more inflammation and more toxicity and more cell damage and mast cell and all of this stuff. It's like you're literally now a breeding ground.

Your hospitable for these organisms to thrive off of your body, break down your collagen, you know, reproduce, etc.

Immune dysfunction and inflammation

. And so I feel like we have to focus on that particular patient sitting in front of us and like, what's their collateral damage? Because I think that these like, if we're just talking Borrelia, it goes to the areas of the body that either because of genetics or because of where our previous injury, that patient is already vulnerable and it's going to exploit that again with inflammation.

And so it's kind of like we have to look at the patient as a big puzzle. And we have to evaluate each piece. And it's like okay, which pieces of this patient's puzzle has been altered.

And then the focus has to go there to kind of like healing their new underlying causes. So I always say these infections, when most people realize they have them, they're like, oh, thank God I found the underlying cause.

And I'm like, yeah, maybe two years ago that was the underlying cause. But now that infection has created a whole milieu of other underlying causes, and we have to get to them in order to fix the immune system in order to completely, you know, I don't know if it's completely eradicate the infection or if it's just holding it in remission by fixing the immune system.

Yeah. And, you know, you and I have come up with the same conclusion over years, seeing our patients over decades doing this. And you're absolutely right with the immune system problem, because I published years ago that Lyme effects, it causes immune dysfunction.

And, we have patients coming in with chronic variable immune deficiency, low immunoglobulin, slow subclasses. Then a couple of years ago, we found these patients with multiple Bartonella species.

And as you know, there's a whole controversy. Like, is Bartonella really a tick borne infection? They're showing up in a lot of the ticks, but there's only one European studies showing that, it's been transmitted with this one particular species.

Yet when you have multiple Bartonella species, you get immune dysfunction, right? Your immune system goes down. And then we're finding more toxins. You're finding them like I am in your patients.

Glo toxins suppress the immune system. Right. And then of course, you're dealing with leaky gut and mast cell disorder and all these insomnia, vitamin mineral deficiencies, all these sources of inflammation and long Covid came along and made it even worse for us, because then they have T-cell exhaustion.

So they're B-cells that make antibodies, the T cells that are fighting the viruses, they're all knocked out of the box. So you're right. It's you can't just treat these infections, the immune dysfunction and getting to the multiple sources of inflammation.

I agree with you 100%. That's that's a lot of times where the healing is because inflammation is responsible, as you said, for fatigue, for headaches, for pain, for brain fog.

But if you've got multiple sources of inflammation, you can't just give antibiotics or herbs. You've got to get to all of it. And I think that is really one of the key points people will hear from both.

You and I and many of the the experts during this healing Lyme summit is you've got to get to these underlying sources. So that's a great point. So how do you actually implement the therapies like therapeutic lifestyle.

Right. You do changes for these patients to help them in their daily routines to get better. What do you do exactly for these patients. Because you've got to get to these underlying sources.

How do you how do you do it? Yeah, absolutely. So, as far as the therapeutic lifestyle changes go, I try to make it simple and I try to meet the patient where they are.

But I kind of put it into 4 or 5 different pillars. Number one is nutrition. Number two is stress management. Number three is movement therapy. And that can be a biggie for these Lyme patients that are in significant amounts of pain and fatigue, etc..

But then we also have detoxification or avoidance of toxicants. And then we have mind set. So nutrition you know, I really like to focus on the positive.

But from a nutritional standpoint, for me there's kind of like some big do nots. And I would say the big do nots are eat foods that are riddled with toxins and glyphosate.

And so, you know, the easiest way to get around that is to focus on foods that are organic or, you know, when it comes to like the Dirty Dozen or the clean 15.

One of the easy ways to remember, for the most part, is that if something has a thick peel and you get to cut that peel off and you're not going to eat the peel for the most part, you know, the pesticides will kind of concentrate in the peels.

And so if you're not eating the peels, then that food is typically safe. You know, there are some some foods where that doesn't apply. And then if there is a peel that is so thin that you're not going to get it off, clearly, you know, you can't wash a raspberry.

It's just going to kind of disintegrate, you know, in the sink. I mean, if you're washing it to the extent you would need to, to remove like glyphosate.

So looking at, you know, clean 15 dirty dozen, but also moving, removing processed foods from your diet, you know, a lot of patients complain eating organic is so expensive.

Eating gluten free, which I'll get to in a second, is so expensive. And it's like, well, yeah, if you're buying all of this process as prepackaged, pre-made crap, you know, excuse me for saying that it is very expensive, but the gluten free version of that isn't going to make you, you know, any healthier.

It's it's poison basically. You know, so I try to teach people how to eat a whole foods diet. Unless you're going to do organic grains, I do say pretty much avoid, you know, especially gluten containing grains, because they are all filled with glyphosate.

And glyphosate is one of the most dangerous toxins, you know, that we have on this Earth. I will then counsel them to try to eat a rainbow. So I like to do fun, easy, visual things that people can remember.

So if you're eating a rainbow, you're going to get all of the various bio flavonoids that our bodies need for cellular health and healing and mitochondrial function and antioxidants, etc..

Therapeutic lifestyle pillars

And so I mentioned gluten, so I'll put that out there. The gluten most people have issues with gluten is what I have found in my experience now. Is it because it's grounded in glyphosate?

Sure. It absolutely could be. But I was always taught that gluten increases online. Xiaolin breaks down the tight junctions in our gut lining, and that increase his gut permeability.

And when we are dealing with a toxin that has to be detoxified out of the body, we have to have the best, you know, tight junctions, the best sealed gut that we can possibly have so that we're not seeing and we're not accumulating all of these bio toxins.

And then I do often suggest avoiding dairy because dairy is very inflammatory as well. So gluten, dairy, sugar, processed foods if we can. And then focusing on eating real healthy foods, lots of lean animal protein.

If you know, if the patient agrees to, you know, if they're not vegan or vegetarian and, lots of non-starchy veggies and then oils are super important.

And there's so many different doctors in this space that talk about giving the body an oil change. Right? So we're eating so many seed oils and vegetable oils that are terrible for us and they're all pro-inflammatory.

And again like what is the big thing that we're trying to fight inflammation. So if we focus on again I like to make things simple. If I'm going to fry something, I fry it with coconut oil.

If I'm going to saute something, I use avocado oil. And then I liberally drizzle real extra virgin olive oil, you know, on my food. And those are kind of like our three basic oils.

So not being fatphobic because we've all been brainwashed in the society to be fatphobic, I think those are my biggies. Adequate protein, adequate fat, making sure that they're healthy.

Obviously the source of the protein is important. You know, my good friend Doctor David Dornfeld always says, like, you're only as healthy as your food's food was, you know?

So I have people say to me, eating red meat isn't good. What do you eat? You eat grass fed beef five times a week. What's wrong with you? And it's like, look, if I could pick one thing to eat, whether it's a farm raised fish or grass fed beef for the rest of my life, and I only got to pick one, it would be the grass fed beef, you know.

So I'd like to give people like these little fun, helpful tips so that they can remember. And it doesn't seem so daunting. But some. People are into detox and removing, you know, toxins from self-care products and toxins from household cleaner household cleaners and trying to detoxify our water, you know, through a filter and whatnot.

Because, you know, I live where we have a well, and I grew up drinking this and, you know, I just had this big argument with my mom. She's like, well, water's the best water.

And I'm like, mom, we live in a farming town. Like, do you know what's in that? Well, water. Because she almost lost it when I put a $5,000 water filter on our kitchen sink.

But anyways. And by the way, we we did the same thing. We're on an old farm, which was 40 acres, Saint George's Farm. I've got water filters in the medical barn where we are.

I've got also a very expensive water filter. I've got air filters throughout. I mean, we're not getting wildfire smoke right now. Thank God. But these are all the toxins now, now question for you regarding the nutrition because I agree with you eating the rainbow.

And and by that this is a horrible joke. But you mean not eating Skittles? I don't know. Yeah, it's it's not what they put on their Ethan, but. Yes. Yeah, yeah.

It's something different here, folks. I'm finding what I'm checking my patients for nutritional deficiencies, though. They're RBK magnesium, jr low. You know, the Sierra mag might be fine, but most of the minerals are intracellular.

I'm getting low RBC Max low, RBC copper levels low, RBC zinc. And I have patients who feel like they're eating healthy diets and they're eating reasonably healthy.

But the food supply has become so depleted that when you're trying to get rid of all these toxins and, you know, I'm at a point, I think nine out of ten patients roughly are now testing positive for mole toxins.

I had one guy today, I sent him name and I went, congratulations, you won the lottery. You're the one out of ten that doesn't have mole toxins these days.

And the other one I wrote before him was loaded with it. I said, do you know where you got to do? I said, yeah, it's

probably college, you know. And these these toxins stay in the body.

So you're right. I mean, it's it's a problem and interesting about the glyphosate in wheat when I go to Europe, I don't know if you've had the same experience.

And I eat the wheat products in Europe. I don't find they affect me the same way. Even the dairy products. I five patients have it out all the time. Yeah, I don't have the same inflammatory reactions, but I don't think people realize.

In fact, this just came out just a while ago. Even with the wildfire smoke, we're all exposed to heavy metals they found with the wildfire smoke in LA, the lead levels in the air.

Well, 100 times above the normal level. Now, how many of the doctors are checking people at this point for lead toxicity, right. Or for mercury? I've had patients who think fish is healthy.

You were talking about, you know, the Omegas. And you're right. Those seed oils omega six that pro-inflammatory. We've got to balance them out with the omega threes.

And that that's why I do a teaspoon of flax a teaspoon of organic, hemp seed a teaspoon of organic black seed. Well, I do a little bit of yogurt in the morning and try to limit my dairy, but that's how I get kind of the sacraments.

Yes, species and good bacteria going in my gut, but I don't think the average person, unless they're speaking to you or an eye who is doing this. I don't think people realize that you're not living in a healthy planet anymore.

With the number of infections and toxins and nutritional deficiencies. It's you're right, starting back where we started, it's just not enough to treat these infections.

You've got to get to all the underlying sources. So yeah. And I. I think that's great. So question. So with sleep which is one of those inflammatory factors.

And I'm sure you have the same problem. Sure. Patients fall asleep. You have some herbs you love for these patients like I do for for getting them to sleep.

Yeah. So one of my favorite herbs is Chinese skullcap for sleep. So it actually contains melatonin in it. And then it also helps to inhibit, an inflammatory chemical called Iddo.

So, it stands for indole two three di oxygenate. And what this chemical does is it takes out tryptophan, which is the minor major amino acid that is converted into melatonin, and it breaks it down into three counterparts.

One of those counterparts is called Quinn folic acid, which is very, neurotoxic and can cause sleep issues too. So Chinese skullcap will actually inhibit edema.

So which will allow your body to convert tryptophan into five, HTP into serotonin into melatonin. So it kind of allows that pathway to be turned back on.

And it shuts off the production of folic acid. So I mean if I could only only pick one herb it would be Chinese skullcap for sleep. But ashwagandha, which I'll talk about a little bit later, also can be very helpful.

It has a mild sedative effect and it can be helpful, for sleep. Valerian, California. Poppy. Let me think. And then obviously melatonin. You know, I love doing sublingual melatonin for people who can't fall asleep.

And then we can do like a time released melatonin for those who have issues waking up in the middle of the night. I always do a white blood cell micronutrient panel on my patients because to your point, serum levels often are high or normal.

And then you look at an intracellular task like red blood cell or white blood cell. And they're drastically deficient. So

sorry I digressed. But I find a lot of low phosphate tidal serine in a lot of my patients.

And if you give fast the title serine at bedtime, it actually helps to keep the cortisol response more even throughout the night. So those patients that wake up at like 2:03 a.m.

and they say, I swear, my body wakes up at night and I'm like, oh, it's morning. I slept through the night. And then they look at the clock and it's like 2 a.m.

that's from a cortisol surge a lot of times. And again, fast vitals searing can be very, very helpful. To, to balance the cortisol and stop that cortisol surge at 3 a.m..

Yeah. I use a lot of the same ones. You like everything. And also because I've had some good luck with Gabe L-Theanine and some. Yeah. If it's like that, restless rumination can't turn the mind off.

That seems to be stopping them from falling asleep or when they wake and actually, there's, there's a gap, a product that actually melts in the mouth.

It's like, you can take that. That is pretty fast acting. That that works really well. Right? No, that that was very, very helpful. So, so in addition to these lifestyle changes, talking about you using botanical herbal medicines, right?

Nutrition, toxins, and sleep support

Yes. No. Go through at least like some of the main ones you're using at this point for your approach with herbs in these patients. Okay. So if it's okay, I'd like to kind of again paint the picture of like why?

Because I have a lot of patients that come in and they're like, you know, you're just going to give me herbal antimicrobials instead of giving me pharmaceutical antimicrobials.

And so I think that people are missing the boat when they look at it that way. So when someone is choosing botanical herbal medicines, I think that they again, should I call it kind of covering your bases.

So like base number one is whatever organism you're dealing with. So let's say it's Borrelia. Let's say it's just Lyme, not baat, not the bees and nothing else.

You need to understand, like the specific immune dysfunction that's caused by that particular organism. So what does Borrelia burg differ? I do, you know, to the immune system.

And for this I'm talking more like the balance between one two, 17. Then understand which cytokines that organism is exploiting inside of the body. Right.

So with Borrelia we have interleukin six, interleukin eight, interleukin one beta tumor necrosis factor alpha nuclear factor kappa beta. Right. Then we can look at the IRBs that are going to cover all of those inflammatory cytokines.

So we can make sure that we didn't leave 1 or 2 that aren't addressed. Then if we know the organs of invasion or the tissues of invasion, we can start to make those tissues or organs inhospitable or kick them out, so to speak.

So with Borrelia. Borrelia loves the extracellular matrix. It loves to eat collagen, right? The exact nutrient profile that Borrelia needs to live is in collagen.

And so if we look at, for example, aggression is how you're on a days and collagen Ace or MMP nine are all exploited to break down the extracellular matrix and the collagen.

Well, if we put together Japanese knotweed, Chinese skullcap, and ashwagandha, we can actually inhibit all three of those enzymes. And so it would help to protect the collagen and the extracellular matrix.

Like if we were talking about the B0. B0 loves to infect the red blood cell. There's an awesome herb called C2 acuta that helps to protect the red blood cell.

And like some of the literature talks about how it kind of like evicts the BCR, you know, makes makes it less hospitable, less desirable. So we need to understand other mechanisms of immune invasion.

So lime goes intracellular Li lime builds biofilms. Right. We have all of these other immune evading mechanisms that we need to understand. Again, so we know how to break them down and actually get to the organism.

And then obviously we have to detox all of these bio toxins and the LPs and all of this other stuff. So we need to make sure that all of the roots of elimination are open and that we're supporting detoxification pathways.

And then lastly, we need to use proven antimicrobials, right, that are specific for the particular organism. So with Borrelia it's anti-spyware Ketel antibiotic herbs.

If it's bco we have to use anti-parasitic herbs. Right. Because BBC it's a parasite not a bacteria. You know same goes in the pharmaceutical world, right?

We anyways, we covered that elsewhere. I'm going to leave that alone. But those are kind of my, my bases. And then because let's say you have the bees, the Bartonella and Borrelia all there, which a lot of people do.

Again, if you go through that sequence of what do they have? What is it a fact, what is it doing to the body? And then you match the herbs up and then you'll see redundancy.

So you start crossing them off so that you end up with the lowest number of herbs that are still going to address all of your treatment goals. Right. So so question regarding these herbs, I mean, I, I practice, of course, mostly integrative medicine and use a lot of pharmaceutical.

But, you know, over the years I've used the Cowden protocol. Right. I've used pimento and I've used, you know, Keenan, a lot of the different herbs from the Cowden protocol.

I've used traditional Chinese medicine. Not the way a Chinese doctor would do it, the way an ignorant Western doctor would do it, like prescribing capsules is if I'm prescribing antibiotics, right, with doctor's arms, herbs, copters, scrutiny, circulation.

And and by the way, those approaches have clearly worked. There's not even a doubt the Cowden protocol that we get a 70% response rate, using traditional Chinese meds from Zong, roughly 70%.

I mean, there's no doubt that I was seeing results with it. Byron White, we would see Hicks is off the wall using al-Shabab, a bard. Are you using some of these kind of traditional herbs the way you know, I've used them over time, or you getting some of these, like, specific compounding, because when I use Japanese knotweed in Chinese skullcap, I'm usually doing it for bbca.

Right? I'm using it in Berbizier protocols with a cornea, and artemisinin and, and the rest. But I was just wondering you using those type of basic protocols, are you putting them together separately?

So for the most part I am using individual herbs and I'm using them at therapeutic doses. And I'm putting the combinations together that, like the specific patient in front of me, needs.

I have put together other herbal blended formulas, for other physicians that find it easier to use them that way. But for me, with my patients nine out of ten times, unless they just got bit and we don't know what they're dealing with, and then we kind of throw the whole kitchen sink at it.

And I have two formulas that are already made that I use for that. No, I'm, I'm making a very individualized, plan. And then I teach them how to take all the bottles home and make their own formula, like in a bigger glass vessel so

that they don't have to open up like 6 or 7 different bottles three times a day, every day.

And regarding these pathways, you were talking about the way, you know, I'm doing it normally, like NF Kappa B, one of the major switches inside the nucleus that turns on these inflammatory molecules you were talking about.

I'm typically using an acetal, cysteine, alpha lipoic acid, glutathione are those parts. Or if I'm stimulating Nrf2, I'm using tumeric, broccoli seed extract, resveratrol, green tea.

Are you using similar types of things? Also, with these herbs, you're doing it mostly with the rebel protocols? No. So I use a lot of NAC, and especially, you know, so one of the nutrients that this test looks for that I do is assisting.

So if I see low cysteine or if I see low glutathione, then I will definitely use NAC. And you know, yes, that does help to lower some of the inflammatory cytokines as well and is super helpful for the immune system and for detoxification as well.

Yes, I use curcumin. Yeah, I use a lot of other, I guess, supplements, you know, for lack of a better word. In addition to the herbal medicines themselves.

Yeah, I mean, I, I just call them nutraceuticals because they really are. Yeah. I mean, and in fact, you know, what's fascinating about it is with glutathione and NAC is that, we we published the first article on glutathione on deficiency for Covid years ago, and most of the viruses out there, whether you're talking about dengue fever or bird flu, any of these out there, at least every pathway I've looked out the viruses need to lower glutathione to replicate. So it's it's not even just a question.

In Lyme disease, I tell people with the flu, they get influenza don't just, you know, get a five day course of Tamiflu. Yet you want to take high dose glutathione because the literature says these influenza virus, HIV virus, dengue fever, they all have to lower glutathione, to be able to replicate.

So it's interesting that what we're doing kind of has a multimodal effect, as is we're talking about earlier. It's not just the bacteria, right? We're seeing parasites. We're seeing viruses.

You also seeing you're seeing long-covid with reactivated Epstein-Barr and Harvey six. You're seeing oh yeah. Yeah. Yes I and I've had patients too that like you know they're like I haven't had a herpes outbreak in years, decades.

And then all of a sudden they get Covid and now all of a sudden they're having outbreaks again too. So it's it's all of these various viruses. I've never seen so many, you know, like the reactivated marker, like on a standard test, like the early antigen marker, like, I've, I've never seen so many of those positive.

Usually it was like, you know, once in a while that would be positive. And now it's like once in a great while. It's not elevated since Covid. Yeah. So we know. It's become a big overlap.

Yeah. Yeah. And you bring up a really good point because you know again it all goes back to immune function.

Botanical medicine and individualized protocols

We are all riddled with parasites. It's bacteria viruses. We're exposed to them all the time nonstop. And I think people forget that. But like we have such a strong robust, just sophisticated immune system that, you know, we don't get sick a lot, right?

I mean, in comparison to what we're exposed to and all of these viruses and bacteria and parasites that live inside of us live somewhat, you know, like synergistically and don't cause a lot of problems until you get that last straw on the camel's back that just kind of like breaks everything.

And then the immune system doesn't function. And for a lot of people, from what I've seen, that can be spike

protein driven, you know, whether it's from the vaccine or whether it's from getting Covid, from just getting Covid from somewhere and getting that infection.

Yeah. No, I agree, this is one of those areas that's becoming extremely important. I mean, I think a lot of doctors are looking at this now like Bruce Patterson, but I think we have a long way to go to figure it out because there's no doubt as we're talking about inflammation driving symptoms, the spike proteins definitely when the vasculature inside monocytes driving monocyte activation, it's making our lives as you know, as Lyme docs, a lot more difficult because we're lowering down the, you know, the bugs, the Borrelia, the BBC, the bark.

And then we'll left, obviously, with these spike proteins that in some patients are playing a role along with, you know, mold and everything else. So yeah, it's a it's a complex picture.

And you obviously have to get to all the sources. As we talked about earlier. Now I know you talk a lot about gal three and the role in Chronicity with Chronic Lyme.

You want to talk a little bit about that and how you think that plays a role. Sure. So it's a binding protein that in a normal situation is is very healthy and helpful.

Right. So if you have an injury or you get an infection, galectin three will go up and basically it recruits various, immune cells and inflammatory cytokines to the area to kind of like kill the infection or repair the injury.

And then it turns off and the body just kind of goes on. When it is chronically elevated. What happens is that it's like an alarm that never turns off.

So we have over recruitment and activation of immune cells and overproduction of inflammatory cytokines leading to like cytokine storm, and it actually stimulates a lot of these other pro-inflammatory cytokines like interleukin six, tumor necrosis, tumor necrosis factor alpha, etc..

And so lowering the level of galectin three, getting that alarm to turn off can help to turn off that cytokine cascade more upstream. And then also galectin three is part of the scaffolding of the biofilm that Borelli makes.

And so if you're able to break down the act in three, you can actually hit the biofilm, like from the standpoint of breaking down that scaffolding or, one of the natural inhibitors of galectin three is, G3, packed assault.

It has a boatload of other activities that are super helpful in a vector borne disease infection. In addition to decreasing galectin three, it reduces interleukin six, interleukin one, beta, it has a dose dependent, increasing of natural killer cells and actually promotes the healthy growth of collagen and can help to pull like fibrosis out of college minus, tissues like the blood vessels or the organs or the skin or the, you know, the muscles, tendons, ligaments, it actually binds heavy metals.

It binds LPs from the dying bacteria as well as mycotoxins. And it can be helpful in healing the tight junctions in the gut by helping to lower nuclear factor, kappa, beta.

So, you know, it kind of hits a lot of, of the treatment bases when you're looking kind of at the whole person and all the goals of working with someone to heal from these infections.

So, so a question for you, and you may not have an answer, but I and I've tried using a modified citrus pectin, but I've got a lot of Messel patients in my practice.

And the citrus is a problem is do you have any tricks to get around this in some of these patients? Because I did have some pain. I look I myself am sensitive to citrus.

I'll still use it, but I'm blocking my own histamine pathways in my ways. But do you have any tricks for that? Because it is so helpful. It is so important and I don't really know how to get around it in some of these, like really sensitive Marcel patients. Yeah.

So I mean, I'm going to kind of answer your question with a story because I don't have a trick from getting around it. And kind of the long winded point of my, of my story or the short winded point is that I think that all of the benefits and the way that it targets, like a mast cell issue from all of these different bases, somehow now outweigh the triggering of mast cell production by the citrus.

So so I'll try to make this the shortest story as possible. I had a patient who had idiopathic hives. He had legit over a thousand hives on his body at all times.

It had been seven years. Nobody could help him and he was on like he was on literally like five different antihistamine, histamine blocker, etc. medications. And he still was riddled with hives.

So he ended up being positive for multiple vector borne diseases. He had a boatload of IgG, IgG and IGA food sensitivities. I mean, he had massive, massive leaky gut.

And you know, I'll spare you the whole treatment protocol. But he's now been treated for about three, three and a half years. He has not had a hive now in over a year and a half.

And he still is being treated. We finally are at the point where we're kind of like weaning him off, because it took so long to get him off those five medications without having rebound hives.

And again, I wouldn't stop treating someone. And remember, I'm using herbs and lifestyle, so it's not like I'm damaging anything. But, you know, I wouldn't stop his protocol.

We've paired it back, but I wouldn't stop until he's able to get off those anti histamine or histamine blocking medications. But I think he's a perfect example where I think the average person would look at him and be like oh my gosh you could never ever tolerate using pack dose all.

But that was he was on it one scoop three times a day. You know, his five grams three times a day. And he doesn't have any mast cell activation, symptoms any more.

You have any symptoms of anything anymore? I mean, that's it's amazing. And I and I think the point you're bringing up, if I've understood this correctly and you said it earlier, if you're getting tired, like so, let's say the leaky gut was driving some of his mast cell activation and the gal three and fixing it is helping with leaky gut, but it's also helping with the scaffolding for the tickborne disorders.

So basically, because you're getting to the sources of where some of this is coming from, ultimately you left him on an H1, H2 blocker, and a lot of my patients maybe taking Cromwell and sodium and, Monta Lucas Singulair, and Keith Todd often, you know, and they're low dose naltrexone.

They're doing everything that they can at this point. They're taking his to quell with quercetin from research nutritionals. Right. Dow enzymes, you're doing the whole boat of it.

Galectin-3, mast cells, and gut healing

But the point you're saying is, yeah, even if they're having a little bit of sensitivity in the beginning, it's maybe worth sticking with it, because ultimately it's going to help to get to some of the underlying inflammatory causes of even where the mast cell activation is coming from.

Exactly. You said that so much better than I did. No, no. So no, that's a great story. In fact, I have someone I'm thinking of right now that I may actually want to talk to.

By the way, do you also use bovine immunoglobulins? Like, you know, I'm using that spice. Yeah, yeah. Using the spice also for leaky. Got your findings. Yeah.

But but takes a while, right? I mean, take months. Really. Yes. Yes. Right. So we've gotten to the point now. So

using these therapeutic lifestyles, we're doing the herbs using gal three.

What do you think about doing this? It has to be all of it, right? You can't just do the herbal protocol without the therapeutic, like you're saying basically for people.

And this is an important take home message. You really can't do the therapeutic lifestyle without the herbs. The herbs without it. This has to really be a complete picture of integrating all aspects of it.

So I call it the big giant ball of wax. You have to melt it all together. And I mean, and it's it's sounds overwhelming, but it is doable. And, you know, I do this this is what I do with every single patient.

And if you do it, it works. It really does. I mean, I wouldn't honestly, I wouldn't be sitting here if it didn't. Right now, of course. And and also do you find also because we were talking about the six main inflammatory factors infections, toxins, microbiome issues, leaky gut, Marcell, insomnia, vitamin mineral, the ten downstream effects you're treating, for example, mitochondrial dysfunction, cell danger response in these patients and Pots this on anemia your get your your genes basically doing the same thing.

Never those pieces of the puzzle are for that patient. Yes. Right. And in fact you know the cell danger response. What's interesting about all these factors is until the thing about the cell, for those of you who've not been listening to the whole summit and have not yet known about this, the mitochondria basically having healing aspects of kind of zero, one and two, and if it gets stuck in illness, it's not going to get better.

So if you're in a dangerous situation like wildfire smoke or you still got infections in your body or toxins, you can give all the herbs you want and detox all you want until the body feels safe.

And you can verify this. Also, Mariah, even limbic retraining for psychological trauma, right? Like some people, if that don't feel safe with this, they don't get better.

Are you doing some of the limbic retraining for these people? Also? Yeah. So we have, Lyme literate psychotherapist and my office, that do various, you know, one of them does eMDR and hypnosis.

I actually love it because it's cheap and easy. I mean, I will just let patients go and sit with the headset for free, but like we do brain tap. I've referred people to Annie Hopper.

Like, we have all of these. And then I will teach, like, simple breathing techniques that help to stimulate the vagus nerve and pull you, you know, back into, parasympathetic, but yes, all of that's important.

I feel like the patient who have the hardest time healing are the patients who have not dealt with their past trauma. And I'm 100% agree that, you know, the difficulty for you and I, I can throw medication, you can throw we can do everything we're doing.

But sometimes the trauma is so severe. And I affectionately refer to these patients as the walking wounded. And my you know, I've had my own trauma. My wife has had it.

I have empathy and compassion because I have some experience with it myself and so is my wife, but I will. I have seen patients that once they've done the proper limbic retraining, exactly what you talked about eMDR, Annie Hopper up to air, primal trust.

Doing any of those with brain tap with neurofeedback techniques. But that takes time, right? It can take six months a year, but once they do it and I've heard this validation from many patients, it was one of those last pieces that they needed to do that when the herbs and then the medicate and everything you're doing, it kind of all came together.

So you're seeing the same thing. I am with this too. Absolutely. And that's one of the reasons why we talk about this, like in the first 1 or 2 visits.

So it's just it can be something as simple as just finding every day, like every morning and every night and people, you know, they feel all weird doing this in the beginning, but it's like, just find something that you're grateful for.

You know, something you love, something you're grateful for. I picture yourself sitting in the sun on the beach. If that's your thing, just take a few minutes and think.

Feel something positive and just that can start to shift things. And, you know, I say this over and over again to like, mindset matters. If you don't think you're going to get better, you're not going to get better.

And, you know, I think establishing a partnership with a medical practitioner that you trust and that listens to you and that, you know, you feel like they've got your back because I'm sure you see these patients, they come in, they know.

They know more than I know right about these. In fact. And they've learned from Doctor Google, which can be good or bad in some cases. Right, right. But they come in and part of it is like, listen, I've got you, I'm going to help you.

I'm going to listen to you like I'm listening to you. Please, like, stop searching, stop doing all of this other stuff. And just like I just want you to focus on calming down.

Trust your body, you know, trust that what we're doing is going to work and it makes a world of difference. Like where you bring that patient to mentally and emotionally.

You know, I think this is the first time I've heard during the talks with you and I interviewing, you know, doctors and experts. I think it's one of the first times I've heard this.

And you brought up an extremely important point.

Trauma, limbic retraining, and mindset

I tell people that part of the reason I think I have such good success and you're having such great success, it's not just the medication and the herbs and things we're doing, it's the fact that we care.

It's the fact that we're committed. We're not going to give up until we get better. They feel the compassion right that you're in there, right? You've got their backs and they know it.

And when someone comes in, right, there's that part of them that's down below. They feel it with you. And once they have that trust, it makes all the difference in the world for the healing journey.

It's one of those intangibles. I don't I mean, I don't remember learning it in med school, but I can tell you the success rates when you get out into the world.

Boy, that's it's just amazing. And I don't think doctors you're taught it enough that you have to listen carefully. Right. And and have empathy and compassion and really that patients know that you've got their back and you're not going to give up makes a huge difference in the healing journey.

It does. And it's it's that almost it's like they've been searching, searching, searching, going, going, going. You know, and it's like that ability to just kind of like let go, like just let go, surrender trust. Right.

And then all of a sudden, like the the body just shifts like there's a huge energetic shift. And I think that's what you need in order to be able to receive really any of the treatment.

Yeah. No. That was great that I think that's very helpful. And I think people listening, they get a lot out of it. So question I know you have some masterclasses on teaching people about what you're doing and you've got some upcoming events.

Why don't you tell us a little bit about what's coming up in the future? Sure. So, there will be a masterclass following this summit. I've also started the Lyme Bites podcast.

So really just talking about all of the various topics that, that one could talk about regarding, Lyme and other vector borne diseases and really complex chronic illness in general, and kind of how to recover, in an integrative or natural fashion.

And then annually we have the Lyme Bites Symposium, which is an in-person as well as virtual, conference style summit that brings together, you know, some of who I would consider to be the the top people in the vector borne disease space.

And, you know, we do full on, like, medical lectures style and everything sort of like cited referenced. And it's community building for practitioners as well as patients.

So. Right. And there's a symposium coming up in November of this year also for the line bites is that. Yes, yes. And we're looking at doing it in Fort Lauderdale this year.

So hopefully that pans out. That's great. So this is just wonderful. So people are going to want to get in touch with you. What's the best email. What's the worst website.

What's the best way of getting in touch with you. So I think the best way is just go to Doctor hinchey.com. And from there there are funnels into, you know, whether it's the educational things that I do, which would be Lyme bites or my clinical practice which is called Tor, or my herbal medicine company called Lyme Core.

Programs, resources, and closing remarks

You can find your way from Doctor hinchey.com to either of those three other websites. And that's doctor and she, Dr. Hancock. Correct. Okay. Great. Right. Thank you.

This was really enlightening for people because you and I have very complementary approaches of how we do things. And we both have successful, you know, approaches to this.

So I think it's it's great for people to know kind of what's out there. And the fact that you're doing it from an herbal scientific perspective. Right, that's still based on hard science and look or herbal therapy sitting around for thousands of years way before pharmaceuticals have been around.

So, I mean, this is one of the time honored traditions, right? That that you're learning with it. So I want to thank you for being out there and doing this for people, because I know this is not easy.

I don't think people realize that, being a Lyme doc, whether it's a natural path like Doctor Integrative, whatever, it takes a lot of time. It takes a lot of effort.

It takes a lot of compassion, a lot of going through the literature. So I would like to honor you and thank you for all the years of dedicated service you've done for the community and for helping me to co-host, because it's been such a great pleasure doing this with you.

It has an absolutely the same to you, honestly, like I've read your books, as soon as they came out when I knew very little about Lyme. So you've you've helped me more than I think you know, in my knowledge regarding vector borne disease.

Now I know my great pleasure. So for those of you who've been listening, my name is Doctor Richard Horowitz. I'm the co-host of the Healing Lyme Summit 2.0 with my co-host, Doctor Maria Hinchey.

We've been talking today about therapeutic lifestyle changes and botanical medicine in the treatment of Lyme. I want to thank everyone for joining us.

I hope you got a lot out of this as I did well, hope you hope to see you again very soon. Bye bye.