Dr. Jill

Your Functional Medicine Expert®

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#14: Dr. Jill Talks With Dr. Conan Shaw Discussing Natural Treatments to Lyme Disease

Text:

Dr. Jill 0:12

Welcome! Just a few housekeeping things: Please feel free to share if you find this content helpful. We will be recorded, so if you miss part of it, you can always watch it later. Be sure to ask your questions. I'll be keeping a little bit of an eye on the feed, so if you have questions, we'll try to answer some of those live as well. As always, I'm totally excited to have you here. If you want more information about myself or any of the information I write about, you can find that on my website, which is JillCarnahan.com. And you can find retail products at DrJillHealth.com. I want to introduce my guest today. I'm so excited to be talking to him, my colleague and friend, Dr. Conan Shaw. Dr. Conan Shaw is a certified functional medicine practitioner and board-certified clinical nutritionist with over 20 years of experience.

Dr. Jill 1:02

And I'm going to read the rest of his blog, but I want to tell you something personal. I remember when we first talked a couple of years ago. It was really, really neat for me to talk to him on [his] level [about] the kinds of complexities and patients that he sees. Realize [that] he is as bright, as smart, and as incredibly brilliant at these complexities as anyone I've ever talked to. I think I told him that at that time, just being like, "Wow, you really know your stuff!" And he's so humble, he won't tell you that, so I get to tell you. But he is a really, really smart guy, and you're going to hear that in these conversations. The stuff we're going to talk about today—Lyme disease, mold-related illness, MCAS, trauma, etc.—is complex things. And there are not a lot of doctors on that level who really understand how they all meld together. I always get excited about our conversations because we go deep, and we almost can bypass some of the superficial things and go right into the deep complexities.

Dr. Jill 1:55

He works with individuals to help them achieve their health goals. I know he gets to the root cause of illness. He uses this integrative medical approach and specializes in treating the 'why?' behind a broad spectrum of health issues. He looks at deficiencies in slow metabolism, gastrointestinal issues, mood-related concerns, cancer, chronic fatigue, complex autoimmune disease, and, as we talked about, Lyme and mold-related issues. What I find so interesting, Dr. Shaw, is that—we talked about this right before we started to

go live—Lyme and mold, we didn't choose them because we probably wouldn't have chosen them. They're too complex and hard to treat, but they chose us. So I would love to hear a little bit about your story. First of all, how did you get into functional medicine, and then how did you get to be where you're at in Lyme country and treating these complex patients?

Dr. Conan Shaw 2:44

Thanks. I appreciate you having me here as well. It's fun to chat live. I think, like a lot of functional medicine doctors, I stumbled into functional medicine by having an experience that was a little bit challenging. And I learned about functional medicine through a personal experience. To make that somewhat long story rather short in pre-med [inaudible]. [inaudible].

Dr. Jill 4:03

Hey, there we are. Can you hear me?

Dr. Conan Shaw 4:07

Where did you lose me in my story?

Dr. Jill 4:08

Yes, I think we got a little frozen. No problem. I was going to stay live or restart. No big deal. So we'll just restart. I just heard the very beginning, maybe a sentence, and then we lost you.

Dr. Conan Shaw 4:16

Okay, so in undergraduate school, I had a DPT [and an] MMR shot. Did you catch that part?

Dr. Jill 4:23

Yes.

Dr. Conan Shaw 4:24

Then I had a very, very traumatic time with that. [With] my first introduction to mast cell activation syndrome, I actually had acute hives—a terrible reaction with hives. I was medicated for that for about six months. Claritin was the new drug at the time, and I skipped it. I missed a day and ended up hospitalized with hives from head to toe. My sister, who was in chiropractic college, sent me to a nutritionist who had studied under Jack

Bland, which was interesting. He changed my diet and gave me some liver and colon support. In seven days, I was asymptomatic without medications. So that immediately was tossed into the mindset of what... So I called and asked him what was going on. And he said, "Well, was Claritin treating your symptom or treating the root of the problem?" I was like, "Oh my gosh, here we go." That started my journey in functional medicine early on. Then it was 20-something years later that Lyme caught up with me in a vicious, vicious way. And so I learned rather personally and very quickly about the trials and tribulations of biotoxin-borne illness.

Dr. Jill 5:38

Wow. So, you had to deal with some of that yourself. I understand that journey very well. The same [is true] for myself with mold and Lyme, too, [with regard to] the complexity of mold-related biotoxin and Lyme. There are a lot of similarities, and many of the people we see have both. But the complexity there [is so great that] I don't think there's anything else that we do that's more complex. Would you agree?

Dr. Conan Shaw 5:58

It's so deep. When people are suffering from the immune system doing what it's designed to do, it's an incredibly complex puzzle to unwind, no doubt.

Dr. Jill 6:12

I totally agree. I would love to know: Say a patient first comes in and you're doing the interview; obviously, you start with good questions and stuff. But what's your kind of initial approach? And then, if you do find that they have these layers, where would you go? What would you treat first? How would you do that?

Dr. Conan Shaw 6:28

Wow. I guess you and I are always chasing self-regulatory mechanisms—allostasis, or the body's ability under stress to reset itself to normal. And when someone can't reset to normal, there's either an infection, a toxin, hormone dysregulation, immune confusion, or a combination of those four things together. You try to differentiate: Is it an infection or a toxin? You ask a number of questions: Are you exposed to chemicals? Do you have amalgams? You start looking into some genetics. Do you live in western Pennsylvania, and do you run in the woods? Right? [laughing] So the idea is that you start some line of testing to confirm. I am somewhat of a diagnostician, but I almost feel patients who are really suffering on that spiritual level. There are so many layers. It's almost intuitive that you know you're getting into something kind of deep, right? So then I try to differentiate between the type of biotoxin that it is—are they moldy or 'lymey,' right? [laughing]

Dr. Jill 7:30

I totally agree. Which is like, which came first? Which is more... Yes. I totally agree with you there.

Dr. Conan Shaw 7:36

I know when I get into the biotoxin space—meaning [that] toxicants are manmade chemicals and biotoxins are toxins from living things like mono, Lyme, or mold—and in these kinds of stealthy viruses and bacterial infections, I attempt to figure out what's the most dominant pressing issue that's suppressing the immune system. Usually, the consideration of emotional trauma comes into that as well, which I know that you dive into with your patients. So the first [step] is to assess if it's Lyme or if they're just a Lyme patient. In Butler County, Pennsylvania, we're [at] the top percentage of Lyme [disease] diagnoses in the country for the last two years in a row. So [for] patients who come in [with] strange symptoms, you almost go to Lyme. You just start thinking, "Maybe this is a 'lymey' thing," and you start testing. But is it a Lyme patient? Or is it a 'Lyme and' patient? I love my Lyme patients who are just Lyme.

Dr. Jill 8:44

Yes. That's easy, right?

Dr. Conan Shaw 8:47

It's so easy. There's no Cytomegalovirus. There's no mono. There's no emotional trauma. There's no physical trauma.

Dr. Jill 8:54

You probably see some that come in with a bullseye rash, which we don't always see. In my part of the country, Colorado, they've been bit by ticks from tick-borne relapsing [fever], [inaudible], [B.] miyamotoi, and some of the ones that do not even cause a rash. So I actually rarely see an acute rash because I'm in a non-endemic state. You probably actually see some acute cases. Those are easy, right?

Dr. Conan Shaw 9:17

There's tier one. You can go to IgM and IgG testing and feel that out as well. A lot of people don't have the rash, right?

Dr. Jill 9:28

Yes. Is it about 30% actually do [have the rash]? Is that the statistic you've heard? So maybe 70% don't [have it] or something along those lines?

Dr. Conan Shaw 9:35

I've read so many different opinions on that, and I guess no one can really qualify and quantify it. But very few people have the [inaudible]. [inaudible].

Dr. Jill 10:02

We're missing you just a little bit there. I might need you to repeat what you said there. You froze. We'll see if we can get that. Hopefully, we can get Dr. Conan right back on here. It looks like we're having a [few] technical difficulties, but I will just speak until he pops back on here. I think one of the things he was saying is that with tick-borne infections and Lyme disease, there is a transmission that isn't always so common as what we typically talk about with bites.

Dr. Jill 10:40

You were saying something really important. It's always like this incredible pearl, and then we lose you. So go ahead. I can hear you now. We were talking about the rashes and how they're not that common, and then I heard little bits about transmission. Go ahead and just repeat that.

Dr. Conan Shaw 10:57

Oh, okay. So, obviously, a deer tic is what most people expect, but it's been identified as spiders, mosquitoes, vaginal secretions, semen, and contaminated food as well. So it's not quite as [if]: "I had a bite, I had a rash, I had a fever, and I had the flu." That patient is the slam-dunk diagnosis. Doxycycline kills 90% of the spirochetes—the bacteria in the bloodstream. Amoxicillin kills 80% of those. Those patients are rather easy because there's a bit of a cleanup from the antibiotics. You just do a little bit of support. And most physicians agree that that patient is a candidate for antibiotic therapies and is usually well-responsive unless you have that post-Lyme syndrome kind of genetic predisposition. You tolerated the antibiotics rather well, and you're over it.

Dr. Jill 11:48

Yes. Again, in Colorado, it's very unique because I don't see all the classical [cases of Lyme]. What I see is [that it is found in] a lot of people who are horse trainers, horse riders, [or are] with horses a lot [because of the] vectors, [and] dogs, which we all have dogs in Colorado. So [it's also commonly found in] dog owners and dogs that go hiking and camping. Not that they're always transmitted by animals, but especially in Colorado, I've

seen a half-dozen or more patients that are specifically working with horses all the time. The second thing I see is tick-borne relapsing fever because it's more endemic in Colorado, Utah, Wyoming, and Texas. It's more in the Western states. It's very unusual in that these ticks will come from a log cabin [due to] your body heat at night. You might go camping in the woods and take a little secluded cabin that you've rented, and these ticks are there along with the mice as a vector. They'll come out at night, bite you in your bed or sleeping bag because they feel the heat, and then go back. Within 15 minutes, they can transmit that. You never have a rash. You never know that you were bitten, so it's this thing that you never knew that you ever had.

Dr. Jill 12:47

And I've seen some of those be the most difficult cases because any typical Western blot for Lyme—except IgeneX, which does specific tick-borne relapsing fever titers—will miss it. No one's testing for tick-borne relapsing fever, and they're certainly not testing for 11 strains like IgeneX. And I have no ties with IgeneX. I just know they are the lab that does tick-borne relapsing fever well. Other labs do the regular ones well. But back to Colorado. I've seen lots of spider bites, all kinds of different spiders that carry different things: Babesia, Bartonella, even some of the Lyme-type illnesses, Ehrlichia, Anaplasma, etc. So definitely, like you, I see a very unique [set of patients]. It's not the classical woods and Pennsylvania Rhode Island and Connecticut type of patients. So when you say the 'lymey patient,' what would be the symptoms that would clue you in? What kinds of things would make you think of that as a diagnosis?

Dr. Conan Shaw 13:43

Just to piggyback on what you were saying before about the mysterious bite that no one knows they got the rash for. The other side of Lyme with these stealthy infections is that, from what I understand, Lyme has 23 different ways to outsmart the immune response, to sheath itself from [inaudible]. So people say, "Oh, I had a tick bite three or four years ago," and their symptoms of Lyme actually don't show up until this has had the opportunity to build numbers and have an army. Often, that happens after some kind of drama shows up. They'll say, "Oh, three or four years ago, I had this." But after the loss of a loved one, all of a sudden they show up with Lyme symptoms, and you think, "You're never getting an IgM on those patients." And sometimes you get IgGs, and in your case, you're not getting the test that shows positive. Patients will say this to me: "I've seen 8 or 10 different doctors, and no one can [inaudible]."

Dr. Conan Shaw 14:50

So, the diagnosis of exclusion is a big one. Amplified Muscular Pain Syndrome, fibromyalgia, chronic fatigue, [and] these kinds of things—without causative effect, with no

medical diagnostic capability to actually determine there's a disorder, we'll say, "Hey, you've got these symptoms." That is a very good place to look for Lyme. Classic symptoms: Transient joint pain, of course. People say, "Oh, my knee hurts for a week," or "My shoulder hurts for a week," and there's no rhyme or reason—random pains like that. But neurologic symptoms are very strange. I had an alpha-gal syndrome patient. She came in, and she was all of a sudden allergic to red meat. The alpha-gal syndrome is from the lone star tick. People develop a meat allergy to red meat. So you get very random symptoms. What's the term for food… Basically, they become allergic to all foods. It's almost like an EoE, an eosinophilic esophagitis response, where all of a sudden people are having panic and anxiety after they eat—very strange symptoms. And of course, their physicians are saying, "Here's some Prozac."

Dr. Jill 16:07

Yes, it doesn't make sense. And one thing that clues me in is that the data really shows there are very, very few in the differential of migratory neuropathies or migratory joint pain. So if you have joint pain that is on your elbow on Tuesday and on your knee on Friday, and it migrates around, there are very, very few things besides Lyme disease that cause migratory arthritis. If you just have RA, or rheumatoid arthritis, and it's always your fingers when you wake up in the morning for 10 years, that's pretty classic. And a lot of rheumatological diseases stay in one area of the body and just progressively get worse. But if you're having those unusual migratory pains where you have numbness or tingling one day in the hand, another day in the feet… Brain fog and brain dysfunction are super common with Lyme and mold. So that's an incredibly common thing with the brain and nervous system. Like you said, anxiety, sleep disorders, and depression are all super common. So I think pain and fatigue is the number one and number two—unexplained pain [and] unexplained fatigue. Would you agree? Is there anything else that's like a big key that you're like, "Oh yes, that's very likely"? Of course, mysterious things.

Dr. Conan Shaw 17:10

No. That's really big and actually goes back to the beginning of Lyme disease awareness. In 1970, in Lyme, Connecticut, a rather large epidemic of children [were] being diagnosed with juvenile rheumatoid arthritis. Two people said, "There's no way this is happening." They went to Yale, and they had a number of researchers from Yale come and do some studies. They isolated it in children with the bull's-eye rash. The first spirochete [was] isolated from the skin, from the blood, and from the spinal fluid. It started out that way as a rheumatologic condition. And of course, that's an immune response doing exactly what it's designed to do, which is what's so tricky about this. You're treating a healthy immune system [that's] doing what it was innately designed to do, right?

Dr. Jill 17:54

Exactly. Let's talk just a little bit about that. So if our listeners aren't super aware, basically what Dr. Shaw is talking about is when we have some trigger to the immune system. In autoimmunity, there's always a genetic predisposition toward this overreaction of the immune system. Then there's some environmental trigger, and then there's always gut immune barrier dysfunction. So with that environmental trigger, it could be heavy metals [or something like] environmental toxicants. But many, many times it's an infection. So you could get mono and Epstein-Barr, and then it triggers this chronic viral issue. You could get reactivation of varicella, which is chickenpox, and get shingles. Or you could get bit by a spider, tick, arachnid, or mosquito and get an infectious disease that's in this realm. Now the classical Lyme is just one tick, one strain—that kind of thing. Well, there's a lot of those in that Lyme-Borrelia…

Dr. Jill 18:44

But there are so many more that we're talking about here, and that's why it's not always a bull's-eye rash. It's not always a simple tick. It can be these other things. It's like nature's dirty needles, I've heard. And I love that analogy because they're full of infections. Studies show the average patient who has Lyme disease has two, three, or four other infections. They can be Bartonella, which really affects the nervous system. It often causes anxiety, neuropathies, and seizures—very severe issues. Sometimes [it can cause] PAN and PANDAS with the auto-immune encephalopathy of children. And [it can cause] Babesia, which is a malaria-type illness. It affects the blood, [particularly] the blood cells. So that will cause night sweats, air hunger, anxiety, insomnia, disequilibrium, and those kinds of things. And then there are Anaplasma and Ehrlichia. And don't you see just a slew of these [symptoms] altogether in patients?

Dr. Conan Shaw 19:35

Those are the co-infections, right? Those sit beside the patients who also have mold in their homes or mold [inaudible].

Dr. Jill 19:44

Yes, let's talk about mold. How does that fit into this? How do you figure out which comes first? What's your order of operations if you have someone with you [and have] a suspicion of both?

Dr. Conan Shaw 19:53

Yes. So to determine whether [a patient is] 'moldy' or 'limey,' there are all the different diagnostic tests that we run through the gamut of blood work and, of course, urine profiles that can tell us if they're spilling mold toxins or not. I almost feel like we coexist with Lyme rather comfortably. I just have a vibe. It's almost like mono. [If] you had mono, you might

have been down for a couple of days. [Maybe] you weren't aware that it was mono. It just hangs out in there dormant. Then, whenever your immune system takes a hit, it has an opportunity. It's like, "Oh, the coast is clear!" It comes back out, and it does this thing. So I spend a good bit of time educating the patients about what's actually happening. I think part of it is people coming for treatment. And the other part is that people are really coming for education because you have to know your enemy.

Dr. Conan Shaw 20:41

Understanding what is more likely to suppress the immune system [is important]. For a number of mold and Lyme patients, I'll say: "Hey, go to your house. Do a rather thorough inspection. You can get air testing done and see if there are mold spores there." It's strange. We'll treat a number of patients for mold first, and then [we'll] consider, and I even put it on their treatment plan, "Maybe we'll do Lyme second." When their immune system comes back online, they're asymptomatic. And I say, "Why even go after the Lyme?" If your immune system is robust, I think you can just get past it. Personally, [that's how I feel]. For some patients, it's not—

Dr. Jill 21:13

This is why I love talking to you. We totally agree on that. I say this all the time to patients: I think there are tens of thousands of people walking around with Lyme disease. They don't know they have it. They don't have any symptoms. They don't need to be treated. It's no big deal because, in a really healthy environment, our immune systems are designed to take invaders, have old infections, [and] keep them at bay. We all have tons of old viruses and old infections that are lying dormant in our systems. But then we get surgery, trauma, lack of sleep, stressors on the job, [and] we get in a moldy house, and something takes us over the edge. I would say it's like a limbo bar that dropped. These old infections pop up, like Dr. Conan said, and basically take over [and] start to cause symptoms. So usually, when someone's presenting to our office, as you mentioned, I'm asking them about the house, about the environment, about the stresses, about the trauma. [I do that] because usually, I'd say about 50% of the time, something triggered immune deficiency [or] immune issues where they're not robust enough to take care of the infection. And when you get that back online, that really takes care of things. Even mold affects detox, so I've seen people who look like they have massive heavy metals and toxicities. Mold tends to trash the glutathione status and really, really break that system down. So when you get that back online, sometimes they don't even need as much detox as you would think.

Dr. Conan Shaw 22:39

Right, yes. It's absolutely true. I think you and I would call it 'the total toxic burden.' I actually try to make a list of the bad guys and say, "Okay, obviously, we're dealing with

Lyme, so let's see what else is in there." That's why I'm not a really big protocol guy. A lot of people will call the office and say, "Hey, what protocol do you use for Lyme?" So I say, "There's really no protocol for Lyme; there's a strategy for Lyme." The strategy is to get your immune system smarter, stronger, and faster than the bacteria [and to] pull the bacteria out of where they're hiding. I believe that there are 23 ways that Lyme can hide from the immune system that I'm aware of. So you really need to get your immune system back in the proper space to be able to manage that. But there's no protocol for that specifically. There are a few underlying tones that continue to resurface with people. How many patients are very similar to my story?

Dr. Conan Shaw 23:33

Eight years ago, I went to MedExpress. [I was] very, very ill, which is not like me. I don't usually get sick. When I get sick, I'm not worried about it. Well, I got extremely ill. I said, "I'm going to still get a medical opinion and make sure I'm okay." And the doctor that I spoke to said: "Eh, it's just a virus. Just go rest." And I did. It was three years later, after I had [suffered] an emotional loss, that all of a sudden there was transient joint pain, neurologic [symptoms], panic, and all of these [other] things. I never would have tracked it to that tick bite [I had] three or four years before. So the question that I've asked, and I know you and I have talked about it in the past, is, "If emotional trauma can suppress the immune system, why isn't addressing emotional trauma part of a core treatment plan for chronic Lyme patients?"

Dr. Jill 24:18

Yes. I love that you bring that up. And I love that we're talking about that publicly because, whether it's acute death, the loss of a loved one, a surgical procedure, or even this pandemic that's happened, job loss, divorce, a child in trouble or not doing well in school, or even the death of a family member or friend—all of these things are very traumatic, and they do suppress immunity. We know things like increased sugar intake, loss, or trauma massively affect the immune system—[and] even isolation. People have heard me say this here before, but that was one thing in the pandemic that I was struggling with because they were not taking into account the massive effect that social isolation actually has on immunity. I really think that we were missing the boat. Not that we did everything wrong, but that we didn't take that into account as part of the equation because childhood trauma, isolation, and loneliness are maybe some of the biggest players in immune dysfunction. Why are we not having that discussion?

Dr. Conan Shaw 25:19

It's so powerful. And it's a pretty easy line of questioning to ask people: Give me a number from 0 to 10—where's your stress level? Let me ask you this: How many of your Lyme and

mold-borne biotoxin patients that you're working with do you have on some form of adrenal support at the same time?

Dr. Jill 25:36

Yes, probably 90%.

Dr. Conan Shaw 25:38

Right. So, Lyme is that underlying component of stress [or] overstress. It breaks the bank. It's one of them—one of the things in the total toxic burden. I think the spirit, mind, and body being connected is part of the dialogue. Really, [it's about] communicating with people and saying, "Hey, let's focus on a positive mental attitude and doing things that bring you good feelings, whether it's counseling or yoga or meditation or prayer, whatever it is." Make it part of the treatment plan because pulling people out of that is not just a bacteria; it's more than that.

Dr. Jill 26:14

I totally agree. Again, both you and I have dealt with both Lyme disease and mold personally and have experienced some of these things. But one interesting thing that we've talked about that I think people would bear hearing is that we've both done NLP, somatic work, and some deep work. I will tell you, Dr. Shaw, and I'm happy to say this publicly, that some of the transformative NLP-based somatic-based trauma therapy, thought field therapy, EMDR, and brain spotting—I've done all these things. I realized that with my mold-related illness and recovery, some of those treatments and things that dealt with past traumas that were stuck in my body and system were really affecting my immune system, my ability to fight infections, and my ability to show up in a healthy way. I would say that was equally important to any herbs, protocols, or detox that I did. So if you're stuck and you have Lyme or mold-related illness and you have not even thought about dealing with old trauma, I highly recommend...

Dr. Jill 27:07

There are all kinds of things. Like I mentioned, I'll just repeat them, but DNRS is an online program that Annie Hopper and Dr. Gupta both do that's very effective. You can do it on your own. Both Dr. Shaw and I have done neuro-linguistic programming, or NLP, and some of that somatic work [has been] highly effective, wouldn't you agree, with some of those triggers and things? And in the past, I've done other types of somatic-based trauma therapy. What that is is cognitive behavioral therapy, where you sit and talk to someone about your thought processes. You talk about why you think that way. But if you're analytical, like Dr. Shaw and I, we don't need more analytical stuff. That's where we get stuck. We get stuck in our heads. It doesn't do any good for those of us who are analytical

because we've already written it down, journaled it, made the plan, thought about it, tried to figure it out, and can't get past it. What we're talking about is in the cellular tissues of the body, where trauma is stored subconsciously. How do you get there, get to that level, and start to feel? You don't talk about it; you [only] say, "Oh, my heart hurts." What does that lead to? Where are the memories? And how do you deal with those things? So I won't go into all the detail. I just want to be sure and say that if you're stuck, that's a great place to start, wouldn't you agree?

Dr. Conan Shaw 28:16

Yes, and I love that you're validating the therapies as you are—not to sound like page three of YouTube about it, right? You get down six or seven pages in YouTube and you see some guy and he's like, "If you want to heal Lyme disease, take my Lyme vitamin and feel great!" And you're like, "Who's this person?" [Then, when someone says], "Forgive everyone," you're like, "What?" Clinically speaking, this is all validated [by means of] psychoneuroimmunology, [which is the study of] the spirit affecting the mind [and] affecting the physiology. And either you heal faster if you bring peace to your spirit or you fight a little bit harder. You're still going to help people, but you'll heal faster if you say, "Hey, there was some trauma in my childhood," and have someone help you release that trauma because it's all a bag—it's all a bag of mucky-muck.

Dr. Jill 29:08

I love it. I totally agree. And I always like to clarify trauma because a lot of you listening are like: "Oh my gosh, I had a great childhood. I had great parents." I said that. I know Dr. Shaw said that. But what happens when you're two and your sister gets ice cream and you don't? Or when your father said something that stuck in your head and you thought it as a recording [even though] that wasn't true? Those kinds of things can actually affect your health. And they're not a big deal, but when you don't have the resources at five, seven, or ten [years old], they are a big deal because at that time you didn't have the resources that you do now as an adult, and your little child is still struggling to deal with that thing because they didn't have the ability or the resources to understand at that moment.

Dr. Jill 29:45

Yes, I acknowledge that some people have been through horrendous trauma—that's a whole other ballgame—and I have such compassion for those people. Probably some of you listening will be like, "Yes, that's me," and I'm so sorry if that's you. But some of these things seem insignificant, and even if you've had a great family and a great childhood, they are important to address and deal with. Let's get practical. Not that we're going to make recommendations for treatment, but what are some of the really broad-spectrum nutrients for detox? And do you typically go with herbs first? Do you recommend

medications... Say someone comes in with Lyme and mold, and clearly they're in a moldy house; they have Lyme disease. What are the basic nutrients that you would give them?

Dr. Conan Shaw 30:31

I love that. So like you, I would start with food first. I would always say that if you don't lock the inflammation down in your body with your diet, it's going to be a bit of a struggle. So that makes me somewhat unpopular with certain people, who won't come to see me because they know that I'm this, like, diet warrior. I don't suggest that people go on the keto diet, although the keto is the lowest-inflammation kind of diet that's going on, I guess. But I definitely have people go towards an anti-inflammatory diet just to lay down the ability for the body to be in this space where it can heal. And then we start going into the nutrients. Okay, I'm sorry; let me back up. If it's mold, obviously, your specialty, you get people out of the mold. So you make that clear. And then you say, "Let's start opening up the detox pathways."

Dr. Conan Shaw 31:21

I'm a big fan of genetic testing—the single nucleotide polymorphism testing—and learning where people's weaknesses are on the genetic level because it gives me like a little cheat sheet of where they're weakest. It helps me support them. Glutathione is usually a nice place to open up detox pathways. The primary detox is [of the] liver, of course, the secondary is the colon. They're both extremely important for the body's ability to remove toxins. Remember that sometimes toxins clear the liver, but when the gut is unbalanced, you reabsorb the toxins. That's post-hepatic enteric absorption of toxicity. That happens with estrogens as well. I'm always liver-gut first. I always go into that base. So the diet is there.

Dr. Conan Shaw 32:05

Hydration is usually 50% of the patient's body weight analysis. We titrate up to that slowly. We don't try to just force water. But half the time when I'm seeing the patient, I've got my pom-poms out and I'm cheering for them to stick with their diet because I really, really want them to heal. And then you would go into N-acetylcysteine and silymarin, [which is] milk thistle, choline, and then inositol, and those things, just to support general detox pathways. That's a start. If it's a mold patient, I know you would have a whole protocol [of] binders or different things that you would use. So am I answering the question the way you want me to answer it?

Dr. Jill 32:44

Yes. I just want basic nutrients. So glutathione, NAC, inositol—I totally agree on all that. PC is really powerful for cell membranes, so that's healing there. Really, for Lyme or mold,

those are kind of core. I think with Lyme, sometimes resveratrol and sulforaphane can be effective in helping those pathways. There's a recent study, I think it was out of John Hopkins, that did herbal treatments for Lyme [disease] in vitro. It's one of the more recent ones. It was interesting because many of them didn't do a whole lot in vitro, but the two that outperformed everything were cryptolepis and resveratrol, or Japanese knotweed. Because of that study, I've actually tended to go a little away from some of the old formulas I used to use, and I [now] use Japanese knotweed and cryptolepis. I find that Japanese knotweed has some anti-inflammatory activity. It's really powerful, but it's also very gentle. People don't tend to have herx reactions as much. Cryptolepis is a powerhouse. You better be careful with that one because it really has some spectrum. I think [it has] activity against Babesia and Lyme. Do you use those herbs? [Are there] any herbs in particular that you like?

Dr. Conan Shaw 33:43

I definitely do. And a couple of fun facts on resveratrol because people always talk about their wine and drinking their wine. I did a Facebook post on this about two months ago. You need to drink 18 bottles of wine to get what you get in one capsule of 375 mg of resveratrol. So don't fool yourself with the wine. But the idea there is [this]: In Western Pennsylvania, where Lyme [disease] is epidemic, Japanese knotweed is overgrowing. They always talk about how nature has a cure. It's very, very powerful. I use Japanese knotweed across the board with Lyme patients. I don't usually do that with mold patients, but with Lyme [disease], I do. There's usually an essential fat. I toss some things in for collagen support because Lyme is kind of like the bacteria that gobbles up collagen. It causes a [inaudible] cascade. So I'm educating patients on that. And there's usually an essential fat. Curcumin would be a good source. Just general support for inflammation for some patients is beneficial. It helps them feel well.

Dr. Jill 34:44

Yes, exactly, because most of them do have pretty significant inflammation and pain.

Dr. Conan Shaw 34:49

And suffering.

Dr. Jill 34:50

So yes, I love curcumin. And I'd love to know a few of your SNPs that you may see commonly, so we'll talk about that in a second. But it just made me think of a couple of unique things. Curcumin can be an issue for people with histamine issues. It's not common, but there is a small percentage [of people] who don't tolerate it. So for a lot of these things, like bone broth, people think: "Amazing! Everybody should be on bone broth!"

But not those with histamine issues. Curcumin is anti-cancer and anti-inflammatory. It has so many studies. I love it. But if you have a massive histamine issue, you may not tolerate it. So these are just little pearls. Boswellia is an alternative if you can't do curcumin. I love Boswellia—frankincense is another name for that. And then Quercitin: I love quercitin. It's mast cell stabilizing and antihistamine. But if you have COMT ++, quercitin can be inhibitory. What that can do is cause a buildup of neurotransmitters that are excitatory, causing anxiety or estrogens. Personally, I have the COMTs, of course, plus pus. I think all those of us who are driven and type A have that gene. Do you have that one too?

Dr. Conan Shaw 35:53

I'm a single SNP of COMT.

Dr. Jill 35:54

Okay, cool. What I was going to say, though, [what] I noticed personally is that when I took too much quercetin, I would get breast tenderness, which is [due to] estrogen dominance. So I always know if I overdo the quercetin, I'll get breast tenderness, and that's a sign for me that I have to back up so that my estrogens can metabolize normally. So you mentioned genetics. Is the genetic test something that must be obtained through a physician? Is it something patients could do? And what labs do you like for that?

Dr. Conan Shaw 36:19

Oh, that's a great question. So, some people find it to be a little bit controversial—23andMe. For under $200, I get 17 of the relevant clinical SNPs in the methylation pathway. Ancestry.com would also do that. Some people don't like these gene reporting sites because there's a question about sharing data, and maybe the government would know what you're predisposed to or something. So I think for the amount of money you spend for those SNPs, thousands and thousands of dollars, [it would cost] under $200 to get a 23andMe and get the raw data downloaded. We actually don't use any information from 23andMe. I use Ben Lynch's Company; I use StrateGene. They send data through that. You order the 23andMe kit yourself. You spit into a tube; you send it in. In about three weeks, you get a bunch of information. We take that information in about two minutes and turn it into a strategy report. I can kind of give you the vibe. That's what you're looking at. You get your positive... Is that visible for you?

Dr. Jill 37:24

Yes. We can totally see that, yes. New people would want to see this because they can do all of that on their own. Of course, you might need a physician to help you interpret [the results]. But I totally agree [that with] 23andMe, there is controversy, [but] it's the easiest and cheapest way. I did a New Amsterdam Genomics complete gene analysis [for] $3,000,

and it was cool, I'll tell you. Granted, it was very, very cool—complete DNA, not just SNPs. However, that's way out of the field for most people to afford. I just wanted to know what the company was. I don't usually recommend that. So, we can do this for $200. And then there's also Genetic Genie, which is much smaller but free. So if someone is really strapped or whatever, they can get a very basic report that's decent with [things] like MTHFR, COMT, NOS, and SOD. I love the StrateGene [test] as well. Bob Miller has a program that I don't use, but a lot of doctors do, and it's excellent as well. So there are quite a few out there.

Dr. Jill 38:24

But I love that you're talking genetics because, for me as well, it's kind of this foundation that I don't always go through. That would take maybe a two-hour visit to go through just the genes. But what I do is reference it like you do, so that if I'm giving them quercitin and they have COMT2 mutations, then I'm just aware that I don't want to overdo that pathway. Or, [with] methylation, I make sure that I give them the right form of [vitamin] B, which we're normally doing anyway. Say someone has two [copies] of the C677T [allele] of the MTHFR [gene], which is one of the more popular methylation genes. Would that change your treatment with Lyme or mold? Would you do anything slightly differently if that had methylation issues?

Dr. Conan Shaw 39:01

It would. I would give some methyl donors and that. When you're either compound heterozygous—one of each, the 1298C and the C677T—or homozygous for the C677T, you're 60% to 70% less effective in methylation. So we're talking about moving things in your body and your cell, right? That's methylation. Really, it's what's moving things around, and of the five detoxification pathways, it's one of the more powerful ones. When you have that double SNP, you know those aren't always turned on. So I always remind people [that] "this is not your destiny, but it's where your weakest link is." We know Lyme, mold, a really nasty relapse of mono, or any of these co-infections would turn them on. So I can kind of go into those genetic SNPs and say, "Yes, this is turned on, so I'm going to do more support for that methylation pathway if it's slowed down." So I would give a TMG or a Betain. Or I would give the right kind of methylated B vitamin to the individual, also remembering that that's at the top of the chain.

Dr. Conan Shaw 39:58

I love going downstream and having the other SNPs because if you've got a double GSTP SNP, remember that Lyme disease is [caused by] a bacteria that is giving an endotoxin. You want to [inaudible] that endotoxin from not being able to be detoxified properly. So if I've got a double GSTP SNP with an MTHFR, this person can't get the stuff out of their body. Do

you remember that "You are what you eat, breathe, touch, taste, smell, but most importantly, what you can't eliminate"? That will change my treatment plan immediately. How am I going to get this patient to eliminate the toxin?—because there's your Herxheimer. I know we didn't talk about 'herxing,' but the reaction to killing bacteria and winning the war sometimes makes people feel worse. So you're getting sick while you're getting better. What you're sick from is not detoxifying fast enough. So those methylation SNPs just give me that edge, that knowledge, and that insight to say, "Hey, maybe I can help them feel better while they're beating this monster back."

Dr. Jill 40:54

Yes. I love that you bring that up because patients who are listening and have had this understand this very well. I always describe it this [way]: It's mobilizing and eliminating toxins. We can mobilize pretty easily. I think that's the easiest thing to do in the world. And if we mobilize too fast and we're not eliminating properly, then we get stuck and we get this accumulation. And I'd love to hear your opinion on these things. I categorize things into 'safe.' You can't really overdo the mobilization. For example, with Epsom salt baths, unless you have an allergy to sulfate or something like that, usually, people can tolerate them and do them every day without getting sick. Other things: Dry brushing is also super safe. Hydration is super safe. Most of the homeopathic drainage remedies are super safe. So with those kinds of things, generally, you can mobilize and excrete pretty equally.

Dr. Jill 41:47

But what I find is that things like antibiotics, anti-Lyme herbal treatments, or the mold detox stuff, if we push glutathione, NAC, [and such things] too fast with binders even, those things can push too hard. And the infrared sauna is amazing, but I feel like people can push that too hard too. So in my mind, I'm always trying to weigh these options and saying, "Are we mobilizing too much?" Many doctors are like: "Oh, you're going to have a Herxheimer reaction. You're going to be in bed for five days." I'm like, "Wait a second." I don't like that at all, because a herx is actually this complete inability to excrete, so it's a bad state. You don't want to keep people there. You don't want people to be there if you can avoid it. And I don't know about you, but sometimes it's inevitable. But I'm always trying to at least eliminate or decrease the amount of suffering that's potentially there, because that means we're pushing too hard.

Dr. Conan Shaw 42:36

You're nice like that.

Dr. Jill 42:37

[laughing] Yes, I don't want you to get too sick.

Dr. Conan Shaw 42:41

I will often have a herx protocol for people. They increase your liver support, your colon support, and your [inaudible]. Take an Epsom salt bath and stop your grapefruit seed extract, your biofilm disruptors, and all of those different types of things.

Dr. Jill 42:57

Perfect. Yes, I have a whole sheet of this too. A lot of it is bowel elimination. Like you said, it's enterohepatic recirculation. If you're not eliminating through the stool, you're screwed. [laughing] Not really. But that's one of the things I learned in Switzerland. Three things from there that we don't typically do. As an allopathic MD, you probably do this better than I do, but we were never trained [for it]. And this is colonics—colon hydrotherapy. In a really significant case, [doing it] weekly can be powerful. It helps with that elimination. I don't routinely recommend that, but in Switzerland during the detox, everybody got a weekly colonic, and that actually was a big aid. Coffee enemas are another really big thing that can be done daily in severe cases and can really amp up glutathione production by about 600%. So that can really save people if they're stuck in this detox thing. And then bitters—I'm a huge fan of bitters. We don't hear a lot about that. Do you use bitters much in clinical practice?

Dr. Conan Shaw 43:49

I really don't. But I know getting your gallbladder clearing is definitely beneficial and will help.

Dr. Jill 43:56

Yes. And not everyone tolerates it. If the gallbladder is excreting bile, bile causes sterilization of the small bowel, so you get a lot less small intestinal bacterial or fungal overgrowth or parasitic infections. And then bile is where toxins are stored, so if you're pushing that out, you tend to get a better detox as well.

Dr. Conan Shaw 44:16

Yes.

Dr. Jill 44:17

Cool. Well, any last words of wisdom as far as things that patients might not know? Any last bits of information that would be helpful?

Dr. Conan Shaw 44:31

Yes. I think the more you remind yourself or educate yourself on a process, [the better]. I like to go big picture a lot of times instead of a lot of the molecular things that we're talking about. I really like to be reminded: "You've got like a trillion good guys, and there are like a million or a billion bad guys, and you're going to win." It's about numbers. And you've got to kill enough bacteria to the point where the other army starts to retreat. You're going to get there. The only way to fail at that is to quit or stop looking for answers. I know you do the same thing when you hit a wall; you think, "Eh, it's mast cell activation." You think of histamine intolerance. You think the gut. You think: "What am I missing? Let's do some other testing. Let's take a break." Some people weave. I just remind people: Lyme is a strategy, and it's constantly changing. My Lyme protocols with my patients are changing every month. Diets can change. So the idea is the big picture. If it were a bacteria that was going to kill you, like meningitis, you'd already be dead. It's not about that.

Dr. Conan Shaw 45:35

The problem is that some of these individuals have been suffering for 10 to 15 years. Then they come in, and you diagnose them with Lyme. They're relieved to have an answer, but then here's the eight- to nine-month battle that you've got to fight. You might get a little worse and matriculate towards having good days. Half of what I do with Lyme patients is cheerleading, just reminding them: "It's going to be okay. It's okay not to be okay. It's okay to have bad days; hang in there and keep believing in where you're headed." A lot of it is trusting and healing and trusting in the human and innate intelligence to do what it's designed to do. And that's our job—our job is to interpret the blood work and the patient's response to what we're doing. It's tricky, but the best last tip I can say is don't give up because I went from sleeping 30 minutes a night for three weeks straight and going [to] neuropsychiatric [care], basically at the point of not knowing if I was going to be alive, to [being] completely functional with no symptoms. It took a while to climb out, but once I got a diagnosis of Lyme, I could climb out. I had to dig in and do it.

Dr. Jill 46:39

Yes. Gosh, I love that because people who are suffering, if you're listening and you've had this and you've dealt with it for years, there is hope. Both Dr. Shaw and I have personal experience, and we're standing here saying that we have fully functioning practices. We're busy. We have lives. I can go hiking and skiing in the winter and do what I love to do. I'll tell you really quickly one last story here. Ten years ago, when I was moving to Colorado to start my practice, I was in the midst of, unbeknownst to me, mold exposure and active Lyme disease. I didn't know it, but I had such severe back pain. I have a really high pain tolerance, but I remember passing out cold because of the pain one day. Then, on that flight home to Illinois, where I was transitioning to move, I literally needed a wheelchair in the airport. I'm not the type of person to even ask for help, but my pain was so bad, I could

not even walk onto the plane. That was 10 years ago. Now I hike and ski, and I don't have pain.

Dr. Jill 47:37

And it's funny, Dr. Shaw, my orthopedic doctor looked at the MRI of my spine. He said, "Jill, you have severe degeneration in L4, L5—L5-S1." They were saying: "You need surgery or you need PRP or some sort of stem cells. You need treatment!" I mean, it was bad on the MRI. Guess what? I have no pain. I can do anything I want. I know how to properly lift to protect myself, but I don't have symptoms. There's nothing I feel like I can't do except maybe a 200-pound deadlift, you know? But realistically, I don't have limitations. And yet I have what looks like a severe issue from the Lyme and from that inflammation. So don't be discouraged if you've been told there's no hope, that your pain is chronic, or that you're going to have autoimmune disease forever. That's just not true. So seek out someone like Dr. Shaw or myself to help you. I'll be sure to link to his page. Where can people find you for more information, Dr. Shaw?

Dr. Conan Shaw 48:31

If you link to my Facebook page, I usually put information up two or three times a week there. I have a website, www.drcshaw.com. I put some blogs on there. I'm not as prolific a writer as Dr. Jill is. You write quite frequently. But I have information up there. If people want to look, they can certainly go to Facebook or my website.

Dr. Jill 48:51

Good. We'll be sure to link up with that. And you're still taking new patients, right?

Dr. Conan Shaw 48:56

[nodding]

Dr. Jill 48:56

So if you are out on the East Coast—actually anywhere… Do you do Zoom and virtual [appointments] now as well?

Dr. Conan Shaw 49:01

[nodding]

Dr. Jill 49:01

So pretty much anywhere. So if you have a complex issue and you need someone, Dr. Shaw is accepting patients. Well, thank you so much for your time today. It was so fun as always talking to you. Have a great afternoon!

Dr. Conan Shaw 49:15
Thanks so much, Doctor.

Dr. Jill 49:16
You're welcome.

Dr. Conan Shaw 49:17
Take care.