Podcast Introduction and Disclaimer

If you're focused on just killing the infection, you are going to be sick forever. You're going just basically go through, on treatment, getting better, off treatment relapsing, right?

And so you were dealing with these Lyme flares. I'll just focus on Lymen for the rest of your life. You've tried everything, you've changed your diet, detoxed, even moved homes, and yet you still feel sick.

Headaches, brain fog, fatigue that no one can explain. What if it's not you? What is your environment? Welcome to Mold Microtoxins and More. I'm John Bode.

Each week, I sit down with experts uncovering how mold, microtuxins, environmental exposures affect your health and what real recovery looks like. Let's get into today's conversation.

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Welcome to another episode of Mold Microtoxins and More, where we explore how our homes, workplaces, broader environments may influence chronic illness.

And where bring together physicians, researchers, environmental professionals, and innovative thinkers working to improve patient outcomes. I'm your host, John Bodie, co-founder of the MOLD Pros.

Today, we're going to explore an area that can be particularly challenging for patients and for clinicians. And that's the overlap between Lyme disease, tick-borne infections, mold exposure, and chronic illness.

Our guest today is Dr. Mariah Hinchey. Dr Hinschey, welcome to Mold Microtoxins and More. Thanks, John. It's an honor to be here with you. Glad to have you!

So, Dr. Hancey, before we really get started into Lyme disease and mold and mycotoxin exposure, I'd like to start with your journey. Specializing in Lymen chronic illness is certainly not an easy path for a clinician.

So I would like understand what initially drew you to working with patients with Lyma and complex chronic illnesses.

So it’s a really long story. I’ll try to make it short.

Um, I do have like my own personal journey in here, which I’m not going to get into because that’s really a long. But what I would say is that I was fortunate enough to have a patient when I in clinic at my naturopathic medical school who had chronic Lyme and Babesia.

So like right from the get-go, I knew firsthand that what we were being taught in medical school was actually not the full story and that Lyme did not present with some arthritis and a rash and two weeks of doxycycline cured it.

The young lady that I had had been on months and months of IV antibiotics. She was in her early 20s. she was walking with a cane. I mean, she really, really debilitated.

Dr. Hincheyu2019s Path Into Lyme Care

And then the other amazing thing that i learned was that herbal medicine and various lifestyle interventions as well as different hydrotherapy techniques can actually be really really useful in the healing of both chronic Lyme as well as other vector-borne diseases.

So I really do feel like I was fortunate to learn all of these things in medical school and then to find the International Lymen Associated Diseases Society, or ILADS, literally right out of the gate.

because I think not only had I not had that experience, would it have changed the trajectory of my life, but also of thousands of patients that I’ve been able to help over the past 20 years.

So it wasn’t necessarily by choice, um I feel like it was like by you know I know this sounds cheesy but divine intervention because as a naturopathic doctor we are taught like root cause medicine like that that is the basis of what a natural pathic does and so when I went out into practice being lime literate and knowing all of the symptoms and destruction that Lyme and other vector-borne diseases can cause on the body and how it’s a stealth organism and it is not straightforward testing and obviously very commonly misdiagnosed, I started looking for Lyne in appropriate ways as well as other um vector borne infections and I was finding it so much and i couldn’t ignore it and then i started realizing like wow when you are effectively removing the pathogen and restoring function to the body a lot of these other symptoms and sometimes diagnosed illnesses were reversing themselves and going away and that’s just so powerful and it’s like once you’ve seen that you just can’t see it.

You’ve cleaned, repainted, and replaced filters. And still, you’re not getting better. Headache, fatigue, brain fog? The doctors can’t explain it, but your environment can.

At The Mold Pros, we specialize in uncovering what’s hidden in plain sight. Our environmental testing looks beyond surface mold, identifying bacteria, volatile organic compounds, even microtoxins in the air that you breathe.

Then we correlate those results with your clinical data, showing how your space may be affecting your health. Next, we use our patented remediation process to safely remove toxins, restore balance, and prevent them from returning.

It’s more than just a cleanup. it’s a science-based system designed to help your body heal by healing the environment first. If you’re ready to breathe freely again, visit themoldpros.com and schedule your free consultation.

because wellness doesn’t start in the doctor’s office. It starts where you live. Got it. Well, that’s really makes sense. Let’s, let’s dig a little bit into Lyme.

So, you know, the first thing that pops to mind Lyma Z is you think Northeast part of the United States and you thank a bull’s eye rashes, and that sort of thing.

Um, I tried to do a bit of research. around the amount of new cases. I’m getting numbers from just under 100,000.

You look at the CDC numbers per year, then you look some of the insurance data that shows about a half a million new case per-year.

So I guess how common is Lyme disease in the United States and what should people actually know about its prevalence? Do you see it in clusters in certain areas like the Northeast or is it nationwide?

What have you found? So first of all, it's worldwide. So it is all over the world. Everywhere below the Arctic Circle has evidence of various species of Borrelia causing Lyme disease.

Yes, that is nationwide. And no it is not something that's just isolated to new england or to connecticut where which is where it was found and named so number one number two on the surveillance data.

Is about eighty thousand cases a year but this isn't a mandated reporting. Okay, so first of all, the doctors diagnosing Lyme, a lot of them aren't voluntarily reporting to the CDC.

And so the cdc estimates that there's about 470,000 new cases a year, but that number is based off of the roughly 80,00 cases, that are reported to them.

And if we look at the misdiagnosis, the under diagnosis, all of the issues that we're gonna get into as to why Lyme isn't properly diagnosed, that number is really, really low.

And that was a study done in 2021 that looked at, I believe it was, gosh, actually here, hold on, they have the number. It was actually, from 2010 to 2018. So we actually haven't evaluated the incidence or the prevalence of Lyme disease in over eight years.

And the CDC states it is one of the fastest growing epidemics that we're faced with. Why haven' t we looked at these numbers in eight year? So the number is half a million new cases a year.

That doesn't account for chronic Lyma, that doesn' Anoplasma, Ehrlichia, Babesia Bartonella, Rickettsia Powassan virus, so many other organisms that these ticks and other biting flies fleas when it comes to Bartonella, you know, transmit.

So I think it's grossly underestimated. Yeah, that makes sense. And you kind of touched on one of the questions I had for you. We were thinking about, okay, what role do ticks and tick habitats play?

We've all gone out and gone hiking. I remember shoot as a kid, you always would have like the little brown ticks. You just, pull them off, hopefully get the head out so it didn't get infected, that kind of thing, right?

That's, I can't tell you how many times playing football, You get them in from being out in the fields, et cetera. So what roll does that do? Ticks and take the habitat play.

And then also are there other, Um, you know, insects like biting flies, mosquitoes, et cetera, that carry these sorts of diseases diseases. So as far as other insects, that's not documented and it's a controversial area, so I will decline commenting on that.

What I can tell you is that Lyme and other vector-borne diseases can be transmitted, what's called vertical transmission, from mother to child in utero if mom is infected and perhaps doesn't know or was undertreated.

You're not supposed to donate blood if you have, for example, babesia because it is a red blood cell parasite. Bartonella, we know, is transmitted by mites, biting fleas, lice, You know, so other insects as well as cat scratches, right?

So there are other ways that these bacteria and parasites can be transmitted other than just a tick bite. And then when you ask about the tick habitat, you know, I have people from all over the world and all Over the country that reach out to me.

And, You know one of the big things is like, have a lot of clients in New York City, and they're like but I live in the city.

How Common Lyme Disease Really Is

Right? So the white-footed mouse is the common host for the larva and even the nymph, which are like these juvenile forms of the ticks. And so if you have mice, right, or you Have birds, I've seen these pictures of little tiny birds and on the margin of The eye, there's like literally like 20 little, tiny ninf ticks, And so if you think about it, anywhere that there's birds, any where that's there mice, where there are chipmunks, you're going to have these little tiny ticks falling off that often times are smaller than the size of a poppy seed.

And they're everywhere. So everywhere you are seeing these birds or these rodents, there can be ticks. You don't have to go in the woods. and like crazy wildlife to get these things.

You know, I'll tell you really quick, my son was bit again, June 24th, because it was my niece's birthday and the kids were climbing a tree and I'm sitting there and my husband looks at me and he's like, "I'll kill you if you tell them to out of the tree." Because you know I am just always paranoid.

And my sister-in-law looks and she goes, we just had the lawn sprayed last week. I was like okay. We get home out to two and a half hours later and you know, my son, he's 10. He gets a tick check every single day, night of his life.

And he had two little tiny nymph ticks embedded in him. One of them my husband saw, the other one my has been missed. At bedtime, I was almost like, something's itching.

Turn the light on, there's the nymph tick. So I mean, it's just, It's a huge, huge problem even when you are manicuring your lawns, you're spraying, et cetera.

So we just have to be really vigilant. And I think doing tick checks and using prevention and personal prevention goes a long way because it's easier to prevent than it is to treat once it becomes chronic.

Yeah, very good. Is there a particular timeframe So fortunately you caught at least one of the two right off the bat, right? Is there a certain timeframe that creates more issues than others if you don't remove the tick within a So the longer the tick feeds, obviously the bigger chance there is for that tick to basically regurgitate one of these pathogens into your body.

Different pathogens can be transmitted in different amounts of time. Now, if you look at online or CDC information, you will always see that the tic needs to be attached for Lyme disease for 24 to 48 hours.

What I will tell you is that's not true, but I'll explain if you'd like me to why that is sad. So the Spirochetes, Aurelia, that cause Lyme disease, live in what's called the hind gut of the tick.

And so they're not in the ticks saliva initially. But when the blood meal comes into the tick, which takes a little bit of back and forth between like the anesthetizing agents and the Blood thinners and and things that are in the ticks saliva that go in to make the host not realize that the tics attaching.

But finally, the Bloody Meal comes in when The Blood Meals comes and that actually signals the spiral key to kind of wakes them up and it moves them. Into the salivary glands and into the saliva so that process takes time however.

There are instances that are more common where you will have a partially fed tick attached to a human. And if that tick has been partially feed, then the spirochetes are already there, already mobilized.

It's not going to take that 24 to 48 hours because they're already right there. When the tick's saliva goes in, there's already spirecheats there from the salivary glands.

So transmission can be much, much quicker. I know that one of the times my son was bit, I dropped him off for his little moving up ceremony for I think it was kindergarten.

We were only gone for an hour. He did not have a tick on his face when I dropped him off. And I saw him walk across that stage and again, my husband had to like hold me down because I'm like, he doesn't have freckle there.

So lo and behold, He had another little nymph tick attached to his space because they were out playing in the leaves while they are waiting to come in and go across the stage.

And unfortunately, that wasn't the first time that my son was bit. So I had tested him before with accurate testing. He had never been positive for Babesia.

Anyways, we took the tick, sent it out for testing, the tic came back positive, for Borrelia, Lyme, and Babiesia duncani. And when I tested them a month later, there's a reason for the month, which we'll get to, he actually tested positive.

For both of them. What did that show us? both of those things were transmitted to him within less of an hour of that tick being attached to them. So just be careful because everything that you read online is not what's practically true in the world.

Well, it's interesting, you know, essentially what you're saying is you can catch that tick so far in mid cycle. And so that would abbreviate that timeframe.

Um, I was laughing a little bit because one of the curses of being kind of a mold guy is that I can't go anywhere where there's a public building library.

Ticks, Transmission, and Exposure Risks

a hotel room and then I'm like, ah, I just see it because I am trained to see and it sounds like you suffer from a similar affliction that would be tech related everywhere you go.

I can't even watch a movie where there's tall beach grass and kids playing in it without being like oh my god. Funny, not funny, but yeah. Not funny. My husband was like, are you gonna ever let, like when my son was a baby, he's like are ever gonna let him walk in the grass?

I'm like yeah, once I know that he is neurodevelopmentally normal or typical, yes. Yes. Once he can walk and talk and I now everything's good and he kind of like tell me what's going on, sure I'll let them play in grass.

If it's sprayed. Maybe we can find little children's Tyvek suits you can send them out in and reduce their exposure. So kind of, that's a good segue into, you know, we have at the Bold Pros, were going on nearly 20 years of helping people with environmental illness.

And we have worked with the lime community for vast majority of that time. There is, it seems to be a heavy correlation between lime disease and mold.

And I know a lot of our listeners are curious to learn more about. You know, when you see a patient that has both a history of tick-borne illness and a story of mold exposure, how do you think about the relationship between those two things?

Because they're kind of different, yet you them side-by-side frequently. Right, so it's hard because there's a lot of overlapping symptoms. I would say probably 90% of mold-related illness or mycotoxin illness overlap with that of Lyme and the other vector-borne diseases.

You know, I'd say one of the big differences is usually mold doesn't cause migratory issues. Usually they're pretty

steady. I'm and then with just lime we don't often have a lot of the upper respiratory issues that some of like the and not necessarily the micro toxins like them old spores right can cause i'm but every.

Mostly everything else there's a huge overlap but. For example, babesia causes shortness of breath, causes cough, right? So there's a lot of overlap between babesi and mold.

So, there isn't really like one or two symptoms where you can be like, that's always mold or that always lime because there is such an overlap. But what I will say is that because of the similarities in the way that both of these problems influence the immune system and the terrain of the body, that they have a synergism.

So when mold is there, it is going to make all of vector-borne disease symptoms worse, and it actually makes the patient more hospitable to the infection.

Most people that hear me talk about Lyme disease hear my experience is that if you're focused on just killing the you're gonna be sick forever. You're going to just basically go through, you know, on treatment, getting better, off treatment relapsing, right?

And so you are dealing with these Lyme flares. I'll just focus on Lymen for like the rest of your life. I fundamentally believe that that is because, for example, Lyme changes the terrain, so it changes cells.

It changes mitochondria, it exploits inflammatory enzymes and cytokines that alter the immune system and cause immune dysfunction. So if we have mold in the picture, we know that mold does the same exact things, affects the biochemical pathways and cellular function and mitochondrial function, and inflammatory pathways, an immune dysfunction that Lyme and vector-borne diseases do.

So it's like Lymes already do it, they're doing its thing and mold comes along and makes it worse, or vice versa. So I wholeheartedly believe that you really can't get a handle on one of these infections without focusing on both of them.

And I use this as an example with my patients because a lot of people, especially the spouse or the parent if it's a child, really doesn't understand, they kind of think the mold thing is a bunch of nonsense, for lack of a better word, because they're like, well, dad's fine, right?

And the sister's, fine. Like, why is little Tommy so debilitated? Or like why his mom, you know, developing all of these autoimmune things, but like other people in the family are fine?

So I like to use the example of one of mold's metabolites, um, called mycophenolic acid, right? So this metabolite is actually used as an immunosuppressant drug called Cellcept that we give to organ recipients that have had to have like an organ transplant.

Why? Because it suppresses B cell and T cell function and stops the immune system from fighting that foreign organ and rejecting it. So if you just think about that for a second, that's one metabolite, right?

Not even a mycotoxin that we are getting. Actually, you can correct me. Maybe it is a micro toxin. Am I mistaking? It is. Sorry. It's produced by certain species of penicillium.

Penicilium, yeah. Yeah, yeah. So yeah, and listen, I don't claim to know everything, so you don' have to edit that part if you dont want to. Like I said, i'll claim the authority in line, but not with notwith mold.

Yeah. Just mold literate. So anyways, so I use that example to really impress upon my patients, like how much mold and mycotoxins can affect the immune system.

And anyone that's heard me talk about Lyme before beyond the, you know, making the body inhospitable, my number one goal, number-one goal is to fix the immune system and give back immune competency to the body because in the end i don't care how good your mold protocol is i dont care i'll get your line protocol as if you don'

fix your immune systems and you stop your antimicrobials guess what you're never getting the little last straggler out of there what is mold do what does lime do it just reproduces and grows back.

So if you don't fix the immune system, you're never going to have lasting healing. And if your in mold and if, or if they're colonized or you have these mycotoxins in your body, Yeah.

We've had, I don't know if you know Dr. Gordon Crozier, we've have had Dr Crozer on our podcast before, known him for years and years, but he references Lyme disease and mold, he calls it the dynamic duo.

You know, because they kind of work together, it seems, a lot of the same symptomology. Yeah, so actually I'll tell you so I have a triad so here's the triade that I see day after day After day all day long lime mold spike protein It's like the smoldering fire mold comes along and pours gas on it and then spike is like thrown a stick of dynamite in it Oh, man, I think we just have our next episode if we can have you back on again.

I'd like to learn more about that. So, yeah, we've talked about two things with mold.

Mold, Lyme, and the Synergistic Overlap

And so I it's important to differentiate. There's mold illness. Actually have a mold allergy, ironically. So I get this histamine response if I'm exposed to heavy amounts of mold.

And that's one thing. I think they say about 20% of the population has that. But then there's also some of those symptoms that sounds like can mirror Lyme symptoms, that upper respiratory.

you were talking about earlier, some of those things, but then we have a micro toxin side of that, right? That's a whole other thing, which leads to chronic illness.

You talk about immune suppression and that sort of thing. So, mold can have two different sorts of layers, if you will, and different symptoms associated with that a different issues.

When we talk about Lyme disease, you talked about kind of the upper respiratory. Are there other symptoms that a typical Lyne patient would exhibit? they should look or try to recognize?

Sure. So we're just saying lime. And when we say lime, I mean, Borrelia species. We're not talking about Babesia bartonella or anything else. I just want to make that clear.

Um, so yeah, everything from just systemic, you know, kind of like chills, um, fevers, hot flashes, fatigue, malaise, but then we go into all of the systems of body.

So the important thing to understand is that Lyme infects every cell in the body, so it's going to effect every cells, every organ, and every organs system.

symptoms of Lyme is that it's multi-system. So it is not just the musculoskeletal, it isn't just neuropsychiatric, or cardiac. It is a blend of all of them.

And so what I hear a lot of times, even from very young people and children, is like their whole body is imploding. Because you have multiple systems affected at once.

So there can be joint pain, muscle pain. There can pots like symptoms with racing heart, palpitations, dizziness when you're going from laying to sitting or sitting to standing.

Um, urinary issues, having like weird leakages after urinating, which, you know, is not explained by anything else. Chronic feeling like you have a UTI.

You can have, like I said, respiratory issues. You could have digestive issues, there's a lot of digestive pain,

nausea, change in bowel movements, and then there is a whole host of neurological issues from twitching, vibration, neuropathy, and the neuropsychiatric symptoms are huge in both adults and children, but a lot of times in children they can outweigh the physical symptoms.

And so by neu, I mean anxiety, depression, bipolar, OCD, exaggerated fear response, headaches, cognitive decline, misspeaking. There's so many things because Lyme causes inflammation of the brain, and then that inflammation causes such discommunication and issues, again, both with emotions but also cognitive abilities.

I was listening to one of your some of the other podcasts, which by the way, you have a great podcast. It's fantastic. We'll make sure that we get that connected at the end of this show.

But you also talked about pans and pandas. One of those is there kind of relationships there as well? Yes. So with PANS, which is kind of like the overarching umbrella, Lyme and other vector-borne disease often are one of the contributors.

The difference between PANs and PANDAs is that P ANDAs are only group A strep. That is the trigger. whereas PANS is more of like a panacea. It can be metabolic issues, it can toxins like mold or mycotoxins, vector-borne diseases, viruses.

There's a whole host of other things that cause the neuropsychiatric symptoms. With that, you typically are seeing some sort of OCD, restricted eating, there is issues with motor function.

So you can see like a deterioration of handwriting, you could see the development of motor tics. And then there also can be like regressive bedwetting.

There's a whole symptomology and clinical diagnosis criteria for when you're diagnosing PANS or PANDAS. Again, the point to make clear is PANDS is always associated with group A strep only, and Pans has a wider range of causes.

And really the technical name for either of those is basal ganglia encephalitis. So it's actually inflammation of the basal ganglia through an autoimmune process triggered by these infections that is causing the cluster of symptoms.

And again, this is a clinical diagnosis and, and usually it is abrupt onset. Now, sometimes people miss that first abrupt on set and they blame it on something else, but it also abrupt.

It's like my child changed overnight. And that's a huge clue. And if that happens to your child or to someone's child that you know, you have to rule out an infectious trigger because primary psychiatric issues in anyone, but especially children, do not happen overnight.

Okay. Yeah, that makes sense. You know, other conversations we've had on our podcast that the quicker, the kids, children are amazingly resilient. The quicker you can identify and get that treatment going, The better outcomes that they have.

So that's extremely important. For those, you know clinicians that are listening and they think they a patient that, and these suspect Lyme disease may be, that their patient may have Lymed disease, There can be other co-infections that they may need to look for and be aware of.

So what should a clinician consider? So I think if you're working with someone that has a diagnosis of Lyme disease, and they've never been tested for at least Babesia and Bartonella, for me, those two are a must.

There's a lot of overlap of treatment with Lyne and Ehrlichia in anaplasma. So really, I test for everything, OK? So we have to look at Babiesia, which is a red blood cell parasite, predominantly.

which is the cousin to malaria. Now, it's not documented anywhere, nor does it say it can be transmitted by

mosquitoes. It's typically just transmitted, you know, by infected ticks.

We then have Bartonella. Again, this is most commonly known as cat scratch fever or cat-scratch disease, but then it also has You know, it has other forms as well.

There's actually, I think it's reported that there's like 56 species of Bartonella that can infect humans, and we only have the capacity to test for like four or five.

And it is very common. Then there is, like I said, Ehrlichia and Anaplasma, there was Rickettsia, which is commonly called Rocky Mountain Spotted Fever, There was the Powassan virus, And honestly, they're several more.

It's important to know that you can only get a test result for what your doctor has requested you be tested for. So there's no magic panel that just looks at every single thing that a tick can transmit to you.

um, number one. Number two, for example, a lot of these conventional labs that are looking at, For example just Lyme disease, they're really only looking for one species of LyME.

And there's like 18 or 19 testable species, of Borrelia that cause LyMe and tick-borne relapsing fever. If you haven't been worked up and tested for all of those, Lime cannot be ruled out.

So I have a very silly analogy that I use, but I think it proves my point. If I've a box of crayons with 20 different colors and I tell you to pull out a crayon and you pull a green crayion and say, OK, cool, I'm going to evaluate you for a Crayon, But I am going use a test that can only see a red one.

and your crayons green. I'm gonna tell you, you don't have a crayon because it's not red. Like what sense does that make, right? So we can't do that, but that is what's commonly done.

So when you use a conventional lab and it comes back negative, it like, and first of all, there's issues with the sensitivity of that test and what they're actually looking at, which I won't even get into.

But the point is you've only looked for one species of Borrelia and that's no good enough. And then that also doesn't test for co-infections.

Lyme Symptoms, PANS/PANDAS, and Co-Infections

So there are specialty labs that look at all of the species, look out all the KD bands, have increased sensitivity and specificity to these organisms that have very, very high efficacy rates.

where you can feel somewhat confident when you've had this testing done. And then the same goes for Babesia, Bartonella, Rickettsia et cetera. I will say that conventional labs are pretty good for looking at mycoplasma, which I haven't even mentioned yet.

chlamydia pneumoniae, ehrlichia, and anaplasma. Those a conventional lab are pretty good at. Now, why did I say sometimes with the specialty labs? Because if you test for Lyme too quickly and you're using a test which looks at antibody production or immune response, which is an indirect test, It takes several weeks for your body to produce an immune response or an antibody level that's high enough for these tests to detect.

So if you get bit by a tick on Monday and you go to your doctor on Tuesday or Wednesday and get your blood drawn, you haven't had enough time for you immune system to generate the antibodies for test to be positive.

And then if your in a chronic situation, And let's say you're living in mold, and let say it's suppressing your B cells, well that's the cells that make antibodies.

So it's like we're looking for the presence of an infection using a test that tests immune function. But chronically, we know that these infections suppress the immune functions.

So there really isn't a good definitive way to just test. And that's why Lyme and other vector-borne diseases are also a clinical diagnosis. So you have to do a really good history.

You have do do really a good physical exam. And then you use these tests for Lyme and vector borne diseases to show immune response. But you absolutely don't rely on positive or negative to tell you if your patient has the diagnosis of Lyma or does not.

And by the way, there's other things that you can look at. You can at inflammatory markers, you look other immune markers. Look at liver function tests.

So a lot of times Babesia will make liver functions go up and platelets go down. There's very standard laboratory testing that can be done that gives you clues as to whether there is Lyme or another vector borne disease present.

And again, it's a clinical diagnosis taking everything into consideration. Is it the level of testing? And I love your, your Crayola analogy. It certainly makes a lot of sense, but is, is that why do you think that Lyme disease and other tip-borne illness are so frequently missed or misdiagnosed is because of the, uh, that, the comprehensive testing that needs to occur?

Yes. Remind me, there's one step before that if I forget. But yes, I think that the testing that is most commonly used is flawed, okay? It's not sensitive enough because it's looking at all of the species and it is not looking all the KT bands, number one.

Number two, testing too early will give you a false negative. Three, we are looking for an antibody response to an organism that crushes antibody. production in some people, especially if there's mold in the picture.

So I think that's the biggest piece. But I also think it's misunderstood, it is not taught correctly in medical school, and a lot of doctors won't even order a test for Lyme disease if you don't have the presence of the EM rash.

And there's a lot of issues when it comes to the EM or erythema migrants rash. Number one is that a law of sources report that it is there in less than 20 to 40% of people diagnosed with Lyme disease.

Now, the CDC says it's over 70%, but there's multiple sources that show that it is there less than 20 to 40% of the time, number one. Number two, that EM rash has taught to us that its concentric circles that spread over time with central clearing.

So it literally looks like a bullseye or like dartboard, right? Right. But that's not what they look like. I could show you picture after picture, after a picture of atypical EM rashes.

Some of them look similar to cellulitis or similar ringworm, or they have these weird, crazy, spread-out geographical-looking margins. And then in a lot of people, they're just not there.

I cannot tell you how many people I have had call on vacation and say, send me a picture. And I'm like, that's an EM rash. Go to urgent care, get on antibiotics immediately and start your herbs.

He didn't know what it was. Looks like an insect bite, but definitely, definitely isn't an EM rash. Definitely wasn't a tick. And it's like, what, how?

How can you make that distinction? You know, where, oh, you didn' see the tick, therefore it can't be an E. M. rash? And then it turns out, yeah, it Was Lyme disease.

I would venture to say, you know, I mentioned at the start of our conversation, the bullseye rash. I, um, would adventure that many of my listeners would think, yeah, and I don't have a bull's eye rash, so I'm in the clear.

Yeah. Or I remember getting bit by a tick. Well, let's go back to the fact that it's the size of the poppy seed, right? And I mean, how would you see a the size of a poppy seed embedded in my head unless you got there and looked

through every single strand of hair, right?

Or it's in your armpit or behind the knee or in the groin. They go to the places where it's thin skin and it is moist and covered, warm. That's where they like to live and they crawl until they get to that area.

Most people didn't see the tick that bit them because it was so small and fed and dropped off. Again, they anesthetize you. You know, so you usually don't notice they're there unless you have an itch, right?

After usually several hours or days and the body starts producing like this histamine response. And you know here's the funny thing, saying that like it can't be Lyme because you didn't see a tick, you'll love this one, is like saying, can be mycotoxin illness, I can see the mold anywhere.

Right. Yeah. It's behind your wall. That's just such a silly thing. No, all right, you know, that's good. I'd say I've learned already a ton and on what 30, 40 minutes we've been chatting.

You talked a little bit earlier about, and we see this with mole all the time, is that some people in the house are affected, others aren't. And so the unaffected think that it's all mental, right?

It's on their head, et cetera. Then we talked about some of the chronic issues that are associated with Lyme disease and co-infection. Can you real quick tell us why is it that it becomes chronic in some people and what defines chronic?

So it become chronic when either it is misdiagnosed or not diagnosed, right? If it goes without treatment, which a lot of people do, then you're not going to catch it in that early window when it can be quote unquote prevented from going into a chronic infection.

So that's number one way. Second way is that there are a lot of medical practitioners and even right here in Connecticut at ground zero where, oh, take a dose of doxycycline at a tick bite and it will prevent Lyme disease.

And that probably pisses me off, I'm sorry, more than anything else regarding this. Maybe very close to like the gas lighting, because it was based off of one study.

It was a small study, there are 10 different reasons why that study was so flawed, but for some reason, it's the hill that a lot of medical professionals want to kind of like die on, that that's a valid treatment.

And it just absolutely isn't. So that's number two. Number three, the standard of care is 14 days of doxycycline. And that is just not enough. So iLADS recommends four to six weeks of DoxyCycoline, and it's actually 200 milligrams twice a day.

Not 100, twice today, which is the Standard of Care. for an acute Lyme disease infection. So a lot of people that are lucky enough to get the diagnosis are under treated.

And if you think about like, why do we put someone on antibiotics for a certain amount of time, depending on which infection it is? Well, it has to do with the life cycle and the replication and Borrelia is very slow replicator.

Okay it takes time for it to replicate and so to get through you know the life cycle and the appropriate time to be able to eradicate it. It's typically at least 21 days.

But again, I go with ILAD's recommendations, which is four to six weeks.

Testing Challenges and Why Lyme Is Missed

So I think those are the biggest reasons. Another reason is that Lyme starts making biofilm, or Borrelia starts make biofilms pretty immediately. And what biofilm is, for people that don't know, although I would imagine our mold listeners know very well what biofilm is.

But you know biofilm, is like that fort-like structure that organisms make to wall themselves off from the immune system, but also from medications that are killing it.

And so when Lyme makes biofilm and hides behind it, that doxycycline can't get to it. So if you have a big enough load of Lyne before you get on the antibiotics and you're not taking a bio-film breakdown agent, then you are going to have Borrelia that's protected against the bio film.

And when you stop the antibiotic, it's still there. And it can come out and you've missed it. And I mean, there's a whole host of other things. Honestly, I could go on and on.

You know, Lyme has a multitude of ways that it alters immune function and basically renders itself invisible. As time goes on, it affects T cell actions.

It suppresses T cells, T helper cells. and it actually suppress the formation of antibodies in some people. by altering B cell function. I always say Lyme is an inflammatory infection.

It causes an excess of inflammation, so it ignites cytokine storms. And those pro-inflammatory chemicals of information are ultimately what break the immune system and allow it to go deeper into the body.

Then it changes our cells, it change our mitochondria, It actually steals our nutrients. It steals are phospholipids. Its deals are B vitamins. Much like mold, it affects the fat soluble vitamins like A and D.

And so you know it really starts to make cellular changes in the body that change ultimately how our bodies can function. And so that's how it becomes chronic.

And I call that process making the body hospitable to the infection. This is probably, we'll try to land the plane somewhere around here. I know that you have a hard stop coming up here pretty quick, but it's probably the question that most of our listeners are waiting for.

Can you touch on this briefly? I wanted to see if you could maybe expand upon it just a little bit, for someone that has both Lyme and mold exposure, again, can you dig a bit deeper on what your approach to treating that patient is?

And then we always like to with some hope, because oftentimes, as you probably know, the many of our listeners have gone from doctor to doctor, to Dr.

to Doctor looking for answers. And the after a while, it's like, there's just no hope. This is just my life today, right? This was my new normal. So we try to stress that that oftentimes is not the case.

If you can share a little bit about that, and that's how we'll wrap up today. Okay, perfect. So I think I'll start by the question that I get asked all the time.

And I got asked this so much that, I approached my colleague Jill Christa and said, we have to do a talk on this. The question is, don't you always have treat mold first?

or how are you gonna work on my Lyme? Or I've been putting off seeing a Lyne literate physician because I have mold and I haven't been able to get my mold under control.

So the answer is if you're gonna use pharmaceutical antibiotics to kill your Lymedisease, then yes, you have to treat the mold first because antibiotics encourage fungal overgrowth.

If you had issues with fungus and you take an antibiotic, antibiotics make it worse, generally speaking. That is why It is true that you would need to treat the mold first.

Now, if you are using natural medicine, I'm a naturopathic doctor, so I am using herbal medicine lifestyle medicine

functional medicine approach to this right.

If you are treating that way, you're not encouraging fungal overgrowth, okay? And so for that reason, You do not have to treat the mold first. Now it is our experience that because of the synergism, because the same pathways of immune system, of cytokines, the mitochondrial damage, cellular damage etc.

All the things we talked about that both mycotoxin illness and vector-borne diseases are pushing, not only can you treat the two together, but you will have a swifter, cheaper, easier time treating both of them at once.

And this is my approach. This is what I do. I know it's complicated. And I guess my piece about hope is that there are so many practitioners out there that are not gonna gaslight you, that know what they're doing, they are very well versed in treating complex chronic illnesses, multiple infections.

Chronic Lyme, Treatment Strategy, and Hope

If you can get to a doctor that understands how these things change your actual body, and then understand how to use therapies that help to heal the body and ultimately give your immune system back the ability to function properly, you will be able to us the antimicrobials and stop them and without these infections coming back, without that relapsing because the immune system is able to hold them in remission or in some instances, eradicate them from the body.

So I just encourage anyone listening to find somebody who is versed in doing this from a terrain first approach. Well, Dr. Hinchy, thanks for joining us and helping us explore this really complicated intersection between Lyme disease and tick-borne infection, mold exposure, and chronic illness.

I think the conversation really highlights why these patients can be so difficult to understand. They may have an infection, they may an environmental exposure, that they have these co-infections, there could be immunity or inflammatory issues, and there can other physiological factors affecting their ability to recover.

I guess the important point is that these conditions, these don't exist in isolation, maybe, And that understanding the history, the exposure, and the symptoms, The laboratory findings, getting the right test run at the, right time.

It sounds like as well are all critical pieces to developing an appropriate path. So really appreciate your time today. If someone wants to learn more about you, your podcast, et cetera, how can they reach you?

So you can go to drhinchi.com and that has links to my medical clinic, Tau Vitality, also to My Lime Bites podcast, and then it's also, there's a Limes Bite Symposium happening annually.

It's actually pretty soon and we'll see you there, November 13th and 14th, on Pompano Beach, Fort Lauderdale, Florida. and there's in-person as well as virtual admission.

And then also, let's see, also I have my supplement company, Lyme Core Botanicals, that I created to be able to naturally heal from these chronic vector borne infections and other complex chronic diseases.

Fantastic. Well, thanks again for joining us. I do look forward to seeing you in Florida, as well as DC, if you're going to ILADS again this year. For those listening, Thanks for listening to Mold Microtoxins and More.

Please subscribe to the podcast. And if, you know, someone that has concerns with Lyme disease or chronic illness, share this episode with them. Um, maybe it helps them out and, uh, certainly leave us a review.

Your support helps us continue bringing together these physicians, researchers, environmental professionals, and patients who are working, to better understand the complex chronic illness space.

So I'm John Boddy, co-founder of the Bold Pros. Until next time, remember, sometimes understanding chronic illnesses means looking beyond a single diagnosis and asking how all these pieces fit together.

Until next time, be well. We'll talk to you soon.