Podcast Introduction and Mission

we have proof for the first time, Eva Schoppe published three or four years ago that we're finding beta amyloid, p-tau, and biofilms on autopsy patients with Alzheimer's and Parkinson's.

But we never had an in vivo person who is alive, who took a biofilm persister drug regimen like Dapsone combination therapy and said, well, okay, can we reverse these markers?

What happens? It's the First Times, it's huge. Hi, welcome to the Lime Bites podcast, where we shine a light on the misunderstood science of Lyme and other vector-borne diseases, as well as the truths that many still miss.

I'm Dr. Mariah Hinchy, naturopathic physician and fellow of the Medical Academy of Pediatric Special Needs. I specialize in treating chronic Lyme disease, as well as other complex inflammatory conditions.

In this podcast, we break down what's working and what is not. We share the facts that most people miss, challenge outdated thinking, and give both patients and practitioners the tools to heal smarter.

So let's get into it and change the way we heal Lyma. Hi, everyone. Welcome. I am your host, Dr. Mariah Hinchy, and I'm here with Dr Richard Horowitz.

And today we're going to talk about neuroinflammation and the link between chronic Lyme disease and Alzheimer's, as well as neuro inflammation in general.

So thank you so much for joining me, Doctor Horowicz. My pleasure. Good to see you as always. Absolutely. So chronic Lyme disease patients often have inflammation as the underlying cost of most of their symptoms.

Let's talk a bit about how that inflammation affects symptoms of cognition, including brain fog. Yeah, so when people complain of symptoms of I'm tired, I have muscle aches, have joint aching, nerve pain, tingling, numbness, burning, stabbing sensations.

I can't fall asleep. Keep waking up in the middle of the night. Can't remember words. Walking into rooms and forgetting why I walked in. They have word finding problems, number of problems.

All of this is basically from inflammation. So Lyme disease, and in our case, it's your practice too. It's not just Lyme that's driving the inflammation.

I mean, in most of our cases, Bartonella is just right behind it, probably 80 to 90% of the cases. But Beesia is not too far behind that, at least 70 or 80%. And then we're also seeing reactivated viruses, like some of long COVID patients have had reactivity, Epstein-Barr, Herpesvirus 6. We're seeing inflammation coming from mold toxins, from heavy metals.

The inflammation is not just coming from Lyme, but Lyma is one of the major factors that's driving the inflammation.

Neuroinflammation and Lyme-Related Brain Fog

And the reason I wanted to do this specifically talk about this today is because Alzheimer's disease is a big problem, you know, not only just in the United States where they're expecting the numbers that the US numbers from years ago is that there was 46.5 million people with preclinical dementia.

And when you look at the studies on Alzheimer's, the rates doubled roughly in the last 12 years. They're expecting like 55 million people in world based by 2060 that are going to be demented.

So it's the fifth leading cause of death. And we talk about it all the time, but I think When we talk about Lyme disease, nobody's really ever put together the fact that it is actually one of the causes of why someone may get Alzheimer's.

And I'll give you a perfect example. We're going to talk a couple of cases today, including a case study that I submitted to the Journal of Alzheimer Disease case studies.

One of my patients in Massachusetts was diagnosed with Alzheimer disease. And the neurologist who saw him, he had a positive F18 PET scan, showed amyloid production.

The neurologists never checked him for Lyme or Bartonella. The neurologist never checked him for mold. In other words, he never check him any of the 16 MSITS factors and started him on lacanumab, which is this monoclonal antibody that pulls out amyloid.

But the problem is 15 to 20% of cases can get brain bleeds and brain shrinkage and it doesn't stop the process from going forward. So I said to the patient and the family, let's do a Lyme Immunoblot.

It lit up like a Christmas tree. His Bartonella ImmunoBlot was positive. his Bartonella Fish was Positive. And we just got back mole toxins that are off the wall elevated.

So he's got multiple factors driving inflammation. So if you're a Lyme patient and you have chronic Lyne disease, post-treatment Lymen disease syndrome, and your complaining of symptoms, fatigue, joint pain, muscle pain nerve pain sleep disorders, memory, just know that inflammation is really one of the major reasons why you habit.

And the reason I keep talking always in the last. this point couple of decades about the MSIDS model is the inflammation is usually not just coming from Lyme disease.

But one of the most interesting things we're going to discuss today is just a couple years back, Dr. Eva Sharpie and her group discovered, and this is autopsy cases, not live cases.

that amyloid, p-tau, phosphorylated tau, and biofilms were found for Lyme disease in the brains of people, autopsy patients with Alzheimer's and Parkinson's.

So we have proof that Lyne disease may be one of the underlying causes, we'll talk in a second about how frequent I think that is, but the fact is that Up until a couple of years ago, we didn't have easy biomarkers.

In the last two years, I started going to Quest and LabCorp and looking at some of these biomARKers that are now widely available. And I've got the codes for everybody today so you can listen to this talk and you kind of write down the code and speak to your doctor about it.

I'll talk to him in just a second about. Instead of doing spinal taps, very invasive, or going for F18 PEP scans, you now have the ability to go to the Quest or Labcorp.

And I specifically like Quest Labs a bit better based on the LabCorp testing I've gotten, but you can check markers like APOE to see what is your genetic risk of Alzheimer's.

If it's 4-4, you have a higher genetic. You can. Check a marker called PTOW 217. This marker is highly associated with beta amyloid in the brain and has been shown that if you have an elevated PTAL-217, the odds of becoming demented 15 to 20 years later is quite high.

And the case I'm going to talk to you about today, that was her case. This is a 60-year-old woman came to me for 15 years. mild Lyme symptoms. She had an EM rash, was treated, but still had some joint pain.

Rheumatoid factors were elevated. And she told me her cognition she thought was fine. So over the years, we were using Byron White herbs. We were you using Beyond Balance herbs, We using Cowden Herbs.

Using all kinds of natural things because she wasn't sick enough to do antibiotics. And there came a point when these biomarkers became available from Quest.

I said to her, you know, I started checking my Lyme patients and I noticed that over 50% of the patients were starting to test positive for these bio markers of inflammation.

And I said, would you be willing to do it? She said sure. So she did the test and her PTAW-217 was elevated above range. Beta amyloid was normal, but because of the P-TAO, and because she had a family history of Alzheimer's, although her marker, she was APOE-33, her grandmother had Alzheimer.

She decided to DAPZONE. And lo and behold, we saw a lowering down of PTIO-217 three months later. For those of you listening to this, this may not mean a lot to you, but this is the first case study that has ever been published in the medical literature that we can go in and we could reverse these type of Alzheimer's biomarkers and hopefully prevent cognitive decline later in life.

Alzheimeru2019s Link, Autopsy Findings, and New Biomarkers

Now, again, it's going to need to be proven in a multicenter double-blind placebo-controlled trial. But we're talking about a study now that really, really big implications for people.

So I wanted to make sure that you and I had a chance to kind of go into this in detail and share it with people. Yeah, no, this is great. So you mentioned two of the markers.

Since we're already talking about it, why don't you be complete with that list that our listeners can actually ask their doctors to test them for at Quest or LabCorp?

Are you ready to revolutionize your approach to diagnosing and healing complex chronic inflammatory illnesses in both adults and children? The Lime Bites Symposium is your gateway to cutting-edge education, groundbreaking research, and innovative therapeutic solutions.

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This year's meeting is jam-packed with leading industry experts discussing lung COVID, mycotoxin illness, PANS Pandas, as well as Lyme and other vector-borne diseases.

This conference will arm you with the knowledge, clinical pearls, and practical solutions that you can implement immediately into your practice Monday morning that will literally change your patients' lives and get them on their path to true healing.

So join us at Pompano Beach or virtually from anywhere. Register now at lymebites.com. That's L-Y-M-E-B- Y-T- E-S dot com. So the other marker, so you can get a beta amyloid ratio, in fact I'll give you, I wrote down the codes here from Quest.

The beta-amyloids ratio code 4240 is 11786. Beta-amylloid 42-40 ratio number 11786. P-tau 217 that we were describing. the code from quest is number 13825. Again, P-TOW 217, number 13825. P TOW 181. The number is number 13690. Again, number 1-3-6-9-0.

Neurofilament light, another marker of neuroinflammation. That quest code is 13979. It's called NFL, neurofilment light. Number 13979. And if you want to check your genetic markers for APOE, it's number 12563. So these are the markers that we started doing on our patients.

And again, I started doing this towards the end of my one-on-one clinical career, right? I've now moved into consulting model. So unfortunately, we did not have the chance to do before and after markers in these patients because most of our patients had already done adapsoin combination therapy.

This woman had put off doing adapsoon for 15 years. The only reason she basically did it was because her rheumatoid factor was still elevated with some joint pain.

The p-tau 217 was elevated. And I said, listen, I don't have any evidence that we are going to reverse this. But I will tell you based on what I've read in the literature that they know with Alzheimer's disease and autopsy studies, they found Lyme.

They found biofilms. They found P-Tau. The found beta amyloid. I And we know that Dapzone has great penetration into the brain. The number one effect from Dapsone statistically significant is improving cognition.

I said, you're one of the few patients who has never done it. Would you be willing to? She did it and again, we checked the markers three months later.

Her rheumatoid factor reversed back down to normal. Joint pain got better. And interesting, Again, we didn't know she had cognitive issues because she thought her meditation practice was contributing to her good cognition.

She said to me afterwards, and I put this in the paper that we reported, that she found that was definitely clearer, like the word recall was better. So what she was assuming was, taking good care of herself, I'm meditating, exercising, getting enough sleep, was like, no I actually see a difference.

Really fascinating. So those are the markers that you want to speak to your doctor about. And I want you to be clear with people. Don't freak out if you do these tests and they come back positive.

It's not like we're going to talk today during this talk with Mariah. We're gonna talk about what you actually can do for this because Alzheimer's is not a death sentence.

I'm publishing in the literature, this is also in The Case Study that we are reporting to the Journal of Alzheimer Case Studies, that all 16 MSIDS factors that we've been talking about for chronic Lyme now in my bestselling books, Why Can't I Get Better?

How Can I get better? We'll be discussing it also in a new book from Simon & Schuster, which will be out later this year called Ending Chronic Illness.

I have a whole section in the book on Alzheimer's and how all 16 factors on the MSIDS model are associated. So if these markers come back positive, You're not going to all of a sudden just worry, oh, my God, I have to go on Aricept or Namenda or some of these drugs that are out there.

What you need to do is go back and say, where is the inflammation coming from? Check your genetic markers for APOE, but check for infections. Do I Have Chlamydia Pneumonia?

Chlimydia pneumonia is also an intracellular infection that's been associated with Alzheimer's, just as Borrelia burgdorferi and even denticola spirochetes from the mouth.

H. pylori, Q fever, Coxiella burnetti, it's one of the tick-borne infections. It's published in the medical literature that it is associated with Alzheimer's dementia, but so is herpes virus one, herpies virus six, Herpes, virus seven, CMV.

So there's viruses that are associated and there are, again, antiviral treatments that may be able to help in that case. The point being, if you do get back these markers, You don't just go to a neurologist and say, put me on Nemenda.

Put me an acetylcholinesterase inhibitor because that does not change the course of Alzheimer's. It may improve your memory, but it's not going to change to clinical course.

You actually need to find out where the inflammation is coming from. So I think that's the most important point because in the patients that I checked before we finished one-on-one practice, and I've got 10 of them here briefly.

I'll talk to you about it sometime during the talk today. Three of those patients who finished Dapsone, The p-tau levels were fine, and the beta amyloid ratios were completely normal.

But in seven of them who never finished APSONE, they did have these elevated markers, whether it was beta-amyloids, pta 181, PTA 217, or neurofilament light.

I'll go into some of those cases later, but it's important to kind of think about this because When you go to your doctor now for treatment for Lyme, there's so many treatments out there.

What I'm suggesting is we now need to kind of not necessarily raise the bar, but add this piece of information, just like you would check for co-infections, And many times we check autoimmune markers like anti-nuclear antibody, rheumatoid factors, which this woman had.

She was not CCP positive. she did not have the auto-immune marker for rheuma-toed arthritis. It was an auto immune problem she had from the Lyme, Which reversed when she finished the Dapsone.

So again, I think these markers now need to be incorporated because the Alzheimer's rates we're talking about, they're going up significantly. As time goes on, it's the fifth leading cause of death.

in America going forward. And I think now that we know that Lyme, Borrelia burgdorferi can be associated, and we the DAP zone has great penetration into the brain, I need docs out there to start looking at this.

Obviously, the randomized multi-center study will help us to determine, right, with longer-term follow-ups, whether what we found actually is going to hold up, in the scientific literature.

Right. So I think, you know, the take home point from all of that is that there are markers and we can have these markers tested and they can actually give us clues before the full on, disease process has taken over.

We can look at these, we could use these to screen, and if we see that they're elevated, then we use them as warning signs, but also a guide as to how to help that patient.

So if you do have these markers elevated, you should be looking for all of the, Borelias, all the co-infections, the viruses that often will overrun the body when the immune system has been skewed from one of these vector-borne diseases.

And obviously, we have to get to that root cause. We have look at eliminating these infections but also we have to deal with that neuroinflammation that is driving the process because I think the thing that we've left out so far in this conversation is that the development of beta amyloid plaque and or p-tau is actually the body's innate defense to trying to do with these organisms presence in the brain because they shouldn't be there.

But when they can get there through a leaky blood brain barrier, Because of the neuroinflammation, it turns into this vicious cycle.

Case Study: Reversing p-tau with Dapsone Therapy

So while we're trying to identify and eliminate these underlying causes, there's a whole host of things that we can do to deal with the neural inflammation and actually start to pull out the beta amyloid plaque like using curcumin.

using Chinese skullcap, using green tea. And then amazingly, these same agents actually help to decrease p-tau as well. So as Dr. Hurwitz said, don't freak out.

If you come back with these markers, it's not a death sentence. Use them to guide you. and work with your practitioners to really get to the root causes, the route infections that are driving this actual like normal process in the body that your body is literally trying to protect you from these organisms.

Wouldn't you agree, Dr. Horowitz? No, absolutely. And, and let me just read, this is directly from the article that, that I submitted. Let me show you the 16 MSIDS factors.

You have a sense of what this. So we talked about chlamydia pneumonia. We talked. Lime disease driving amyloid production in the brain. H. pylori, coxiella, brunetti, Q fever, herpes viruses.

So toxoplasmosis, right? One third of the world's population has been exposed to toxo. It's not always active, but if it is active it's been shown to be one of those causes.

Fungal infections, Candida infections. Malazaria, there's other. fungal species that have been associated. They actually find these fungals species in the brains of Alzheimer's patients on autopsies.

Environmental toxins, air pollution, like fine particulate matter. So heavy metals, pesticides, have associated with amyloid production and p-tau. Microbiome abnormalities, decreased diversity and abundance of your beneficial bacteria.

So you could do a GI map, you can do CDSA, You can look at the microbiome to see whether you've got the right type of short-chain fatty acid bacteria that lower inflammation.

Intestinal hyperpermeability with leaky gut. You were mentioning the leakey blood-brain barrier. This is also a problem with leaking gut, with or without mast cell activation.

Vitamin mineral deficiencies, B12 deficiency, b6, benign, folic acid, vitamin D, Vitamin E, all published in the medical literature associated with Alzheimer's dementia.

Not getting to sleep, which is a problem with Lyme disease, of course, where you don't fall asleep or wake up frequently. That will drive some of this phosphorylated tau in brain and beta amyloid.

And finally, the 10 downstream effects on the MSIDS model that have been associated is mitochondrial dysfunction, hormone and immune dysregulation, autoimmunity, liver disease like non-alcoholic steatohepatitis, fatty liver, which is affecting a third of the world's population.

It causes insulin resistance, and which has been associated also with problems with dementia, neurological, psychological trauma and dysfunction, autonomic dysfunction as we see in many of our patients, deconditioning and pain syndromes.

So everyone of the 16-point MSIDS model factors have been associated with Alzheimer's. So if you do, again, these markers, you go to your doctor and you're go, I have to be checked for all of these things.

And if it turns out that the Lyme is active and if not used to persist your biofilm regimen, what I am suggesting is that your Doctor wants to do it before and after with these Markers and then we can accumulate the data and again it can be published in the literature.

Where can our listeners find that complete list? Well, hopefully this article, by the time our Lyme Summit is out in May, the article should normally be published in the Journal of Alzheimer Disease Case Studies, but also the Alzheimer section, all of these are found in my new book, Ending Chronic Illness.

The website is endingchronicillness dot com. And the book will be out later this year. But interestingly enough, what we found with the 16-point MSIDS map is it's not only affecting chronic Lyne patients with PTLV, We published two years ago that it's associated with long COVID.

All 16 MSIDS factors are seen in long-COVID. And before I got the contract for Simon and Schuster to do this book, we knew Alzheimer's. That was the one that I pitched the book.

But since then, We discovered that the 16-point MSIDs model is associated With ADD, ADHD, with autism

spectrum disorder, With allergies and asthma. with the three B's, Borrelia, Bartonella, Babesia with disease, cancer, cardiovascular disease chronic fatigue syndrome, myalgic encephalomyelitis, fibromyalgia, digestive disorders like Crohn's ulcerative colitis functional medicine disorders, autoimmune disorders.

Like rheumatoid arthritis and MS, hormonal dysregulation. In other words, all of the things that we find in our Lyme patients that are causing chronic illness in this country and across the world When I did a deep dive in the medical literature, and I have approximately 2000 references backing this up.

In fact, there's so many, they can't even put them in a book. They're putting it on my website. All of these different diseases, right? Including long COVID, including hormonal dysregulation, all 16 factors are showing up in all of this diseases.

Which is amazing. It means we now have the ability to have a paradigm shift. So if you are a Lyme patient who has ADD, or you're a mother with Lyne disease and you may have passed on the Lymen to your child, and we've seen this happen with autistic kids.

I have some of the practitioners out there that have used low-dose Dapsone and seen that sometimes the brains do work up in these children. The point being we now have a new model for chronic illness.

So in this case, we're talking about Alzheimer's, but all of 16 factors and exactly how they relate, They will be in the paper that'll be published in The Journal of Alzheimer's Case Studies and also in Ending Chronic Illness.

That's amazing. As I told you when I first laid eyes on your book, this book needs to be a desktop reference for physicians. And it's funny, as a naturopathic doctor, the way that you're approaching this, is the kind of way I was taught to approach really any illness when you're working somebody up.

So it's so important to look at all of the pieces of puzzle and do personalized, individualized medicine with that patient sitting right in front of you.

I'm so glad that you have this as a reference for everybody. When I've spoken to naturopaths in the past, it seems like I'm more in line with the natruopathic population that I sometimes…

You are….even with my own… But what's so strange about it is that the healthcare costs in this country, 18% of our GDP is healthcare cost. And 86% of our healthcare costs are chronic disease.

70% percent of health care costs relate to deaths in this country. And we have no model for chronic illness. So the levels of chronic illnesses keep going up.

One in two Americans has one chronic. I think about 25% have two or more. We're dealing with a chronic epidemic in the country and in and there's no model to be addressing it.

What we've done in medicine, unfortunately, is we name the disease and we throw drugs at it, and I have nothing against the pharmaceutical industry. Depth zone combination therapy uses a lot of these drugs, but that's not the root cause medicine.

Root cause medicines means you name disease, get to the underlying 16 factors, so then maybe you still will use some of those medicines, Stories informing every chapter in this book.

These are personal patients over 41 years of seeing 13,000 of these chronically ill patients Where we've reversed the ADD in these patients and the autism spectrum disorder got better I mean the allergies got and migraines got these are all just informed by You didn't get through all the 16 MCIDS factors.

So instead of just, here's your migraine medicine, right? Oh, you were missing magnesium. You needed, your mitochondrial dysfunction. you needed CoQ10.

Your blood sugar swings with mast cell disorder was driving your migrants. We don't think that you think this way and I think it's just not. been taught, I think, in medical school.

So you're right. I hope this book gets into the hands of doctors and patients. It's kind of like the next Burke Manual of when you have something wrong with you, look up the 16 root causes, because in the book I describe not just the pharmaceuticals, but all of the pathways, all the inflammatory pathways.

By the way, what's interesting, and I didn't mention this, is I found when I was doing the research that even though there are 16 MSIDS factors underlying all these chronic diseases, including Alzheimer's, there is 16 inflammatory pathways underlying the 16 M SIDS Factors.

So a lot of times you and I have talked about NF CAP.

Testing Markers and the MSIDS Root-Cause Model

It's one of these inflammatory pathways, turns on TNF-alpha, interleukin-1, intraleucin 6, IL-17, drives inflammation. The NRF2 pathway that lowers inflammation, and at Alzheimer's, this third pathway is called NLRP3 inflammasomes.

So the beta amyloid and phosphorylated tau that's clogging up your neurons when you can't think is coming from inflammation in the brain, from microglia, these small cells in brain that turn on a third inflammatory pathway called the NLRP inflammasome.

I mean, you and I have discussed in another episode here how we shut down the LRP3 inflammosomes, right? Using low dose Naltrexone, low-dose melatonin, some of the herbs you just discussed.

but also Dapsone is a neuroinflammation inhibitor. So in a study that was done about four years ago in Korea with over 3,000 leprosy patients, they followed them for 15 years, the lepercy patients who took Rifampin and Dapzone, which is part of the DAPzone protocol, that's how I got it, their rates of Alzheimer's disease were like six times less if they took Dapsone.

The leprosy patients that didn't take Dapzone, the Alzheimer's rates were off the wall. Now, they were suspecting that the reason the Alzheimers was stopped by Dappzone is because it was acting as an NLRP3 inflammasome inhibitor.

It was stopping the inflammation in the brain driving beta amyloid, driving phosphorylated tau. We don't know whether those Korean patients had Lyme disease or not.

we don' even know how many of the 16 MCIDS factors they had. But interestingly enough, you hear about all these Alzheimer's drugs, You never hear, about Dapsone.

And I had a patient in the Midwest, she's 80 years old. She's one of the 10 patients I was going to discuss today. she took 25 milligrams of Dapzone, which for me is almost like homeopathic DAPzone.

Like literally no side effects. You don't notice it. and she told me after a year, year and a half, She said, my memory is so much better. But we recently tested her.

She came to see me in New York, right before I finished clinical practice, and we tested here. And one of our Alzheimer's markers, or PTAL-181, was elevated.

I said to her, listen, you clearly notice your memory was better from even the low-dose Dapsone. and she's not even noticing a lot of memory issues, but a couple of word-finding problems, which you might say at 80 years old is normal, Can we do better?

I said to her, listen, you really need to consider doing the higher dose Dapsone, but then we tested her and we're

finding mold. And so the point being, You don't just accept the diagnosis, right?

You Don't Just accept your cognitive issues. Get to the 16 point Mensud's model to find out what's underlying the inflammation. and then, we may have other options.

For some people, it may be Dapseone combination therapy. This is again, one case study. But the first one ever published in the medical literature that we can reverse PTAL-217, which is the most important biomarker that people go on to dementia later on.

So it's really exciting information for the Lyme community that this is something that not just makes you feel better with fatigue and joint pain, but might, and I say might might be able to prevent cognitive issues and dementia.

Later on in life. Yeah. And I mean, that's just, I think even knowing these markers, looking at them more as a screen, right? So that you can prevent, because earlier you had said that these Markers could predict like severe dementia or Alzheimer's.

Wasn't it like over a decade later? Are you suffering from Lyme disease or another complex chronic illness and aren't sure who to trust when it comes to herbal supplements?

Hi, I'm Dr. Mariah Hinchey, founder of LyMe Core Botanicals. As a naturopathic physician specializing in complex, chronic, infection-driven illnesses like LyME disease, i needed herbal medicine I could truly trust.

That's why I formulated LyMe Core botanicles. where our herbal tinctures are handcrafted in small batches right here in Connecticut. We use the whole herb, Never Isolates, to preserve the full spectrum of medicinal compounds.

Every single step from sourcing to extraction is done with precision to ensure maximum purity, potency, and consistency. These are the same herbal formulas I used to heal myself and have used for years to help my patients and family members heal too.

And now I'm making them available to practitioners and patients everywhere. Lymecore Botanicals, herbal medicine you can trust from a doctor who lives this work.

Learn more at LymencoreBotanicles.com It's like even 15 to 20 years later, the PTOW 217, it's 15-20 years down the line. So if you're someone who finds it, this is not an immediate like debt sentence, you are going to develop Alzheimer's, but it does mean that you have something going on in your brain, right?

You've got inflammation going. And now you've gotta figure out where the inflammation is coming from. Again, The standard medical model, which I don't use, or you don' use where you name the disease and throw drugs at it.

It is about getting to the underlying inflammation. What are the 16-point MSIDS factors? And what's interesting is Judith McCloskey years ago, she's published four to five articles that there's absolutely no doubt that Lyme has an association with Borrelia.

When they did autopsy studies, they found that lyme was 10 times more frequent when they were looking at these autopsi cases of these Alzheimer's. So we know that's there an Association.

She called it by Cox and Hill's criteria that it's indisputable. There's a statistical relationship. It is one of the causes. And they found that in the Alzheimer's cases they looked at, it was 10 times more frequent people had chronic Lyme disease.

So, you know, the politics, dysfunctional medical politics of Lyne, unfortunately, is it a chronic persistent infection? Is it not a persistent chronic infection, what causes it?

It's hurt the Alzheimer's research also, because it is a chronic persistent infection. And if you're going to deny that these biofilm persister forms in the brain that create beta amyloid, that increase p-tau that are now being talked

about through Eva Schoppe's group and Dr.

McCloskey, it's important to know that there may be, again, its one case study, we can't say much, but it''s exciting because I didn't know whether I was going be able to reverse the pta 217. It'''s never been done.

So it's like, wow, maybe this is going to be something that will affect a lot. Millions and millions of people may be able to get better from this. But also, the woman who was 80 who did low-dose Dapsone, who said to me, my memory improved, you know, in the study they did in Korea, it was 100 of Dapseone.

They treat leprosy with 100, not double dose, 200, and not high dose used for Bartonella. Maybe 100 of Dapsone is all people need instead of worrying about Licanobab and these drugs that are very expensive and shrink your brain and cause brain bleeds.

So there's, I think, new things we can talk about here that's really quite exciting. But we chose the neuroinflammation brain protection summit. The talk was because of some of this that is now showing up, that when I started testing my Lyme patients and seeing so many of them, were starting to have these markers.

I have a 50-year-old woman in Connecticut who's a professor. She did a two-week Dapsone pulse, she had Bartonella, and said to me, because she never wanted to do the full protocol, She said, oh, I feel so much better.

And I said to her, listen, you got to follow up with your doctor here and finish the protocol and look at the 16 M SIDS factors. But you know, when we go to the doctor and you check your blood pressure and your check, your cholesterol, and go for a mammography to rule out breast cancer and colonoscopies and digital resting exams with PSAs for prostate, it's not on the list of things your Dr.

normally does, which is to say, How's my p-tau and my beta amyloid doctor? It's not standard medicine. Why? Because they don't know what to do for you.

They have no idea. If it comes back positive, it's like, well, what do we do? I'm suggesting that you go through the 16-point MSIDS model, which has been published in the literature to be associated with dementia, and then maybe consider the nine-week oral-dapsone combination therapy and some of the herbs that your using that also have scientific validation.

Right. You know, it doesn't make sense to me when we can measure the markers and we know that these markers like beta amyloid and p-tau are reacting in response to an organism, right?

Broader Chronic Illness Connections and Inflammatory Pathways

Well, I just doesn t even make common sense as to why we wouldn't go through and look for all of the various organisms that could be causing this response in the body, because then we would be doing real root cause medicine instead of using a monoclonal antibody to kind of like clean up the mess without turning off the sink.

You know, like to me, it's like using the lacanumab is like, you know we're mopping up floor, but like we haven't turned the faucet off that's making the sync overflow.

Exactly right. It makes no sense to you or me, especially because infections cause beta amyloid. We talked about this in another podcast that the beta-amyloids is protective.

Your body is actually creating it to try and shield off the organism, except the problem is, as it keeps accumulating, it then starts to drive phosphorylated tau and the neuronal connections just don't work over time.

But you're right, root cause medicine in this case is going to be essential, especially with the numbers of Alzheimer's cases that are expected to double in the next 25 or 30 years.

So tell our listeners a little bit more about these 10 patients that you're going to talk to us about. And do you want to

say anything more the study and your paper that?

So the main thing about the paper is that when I went through this patient who is roughly 60 years old, she had never, again, one of the few had ever done Dapsone.

She had an elevated rheumatoid factor with joint pain, but CCP negative, She did not have rheuma to arthritis. She had an elevated p-tau 217, one of the most important markers that gives you a chance of having dementia later on, again, 15, 20 years down the line.

And again she wasn't even complaining of cognitive issues. But she also, by the way, had two Bartonella species. Her Bartonella hensley and Bartona Quintana were positive.

She had evidence of exposure to Q fever, coxiella burnetti. All of these organisms can be associated with amyloid production and dementia. And she also had heavy metals, we chelated her years ago for lead and for mercury.

So we looked for all these MSEDS factors and we dealt with all the factors that we could. She was doing so well, she would come in once a year. she wasn't one of those chronically ill patients.

Oh, I got in a car accident. I need a little physical therapy because my knee's not working. But she was saying, oh, a I'm a stiff, but, you know, walk every day.

It wasn't actually until we checked these biomarkers and the p-towel came back. And I didn't even think to do like a mini cog exam. You can do these small mini mental state examinations to check cognition because she wasn t even complaining of cognitive problems.

And lo and behold, we do the protocol. Three months later, I checked the Quest Labs, the number of the p-tau reversed down to normal, first time published in the literature.

The rheumatoid factors now are negative, meaning we reversed peripheral inflammation and theoretically reversed neuroinflammation. It's an amazing case study because we have proof for the first time, Eva Schoppe published three or four years ago, that we're finding beta amyloid, p-tau, and biofilms on autopsy patients with Alzheimer's and Parkinson's.

But we never had an in vivo person who is alive. who took a biofilm persister drug regimen like Dapsone combination therapy and said, well, okay, can we reverse these markers?

What happens? It's the first times, it's huge. But now I need naturopaths, ILADS doctors, all the doctors out there who are listening and all patients listening.

Again, don't freak out because based on what I've seen, you probably got about a 50-50 shot. that these markers may come back positive. But just like if your cholesterol is elevated, you're going to get on a diet, an exercise program, and you might consider a statin or do red yeast rice, whatever it is you are going do, bergamot.

The point being, there are things you can do. This is not a life sentence that my life is over. but it does require now going through the 16. M six factor.

And as Mariah said, you can check for chlamydia and ammonia. You can for H. pylori. you check to see if Borrelia burgdorferi is active. These are all things that you could do and then saying, okay, these biofilm persister drug regimens, Horowitz has been publishing on them for 10 years.

I do have a consultation model on, believe me, not looking for work. As I told Maria earlier, before we got on I had 75 emails yesterday of people calling me from all over the world.

I published these articles in the peer review literature, so it's open access. Your doctors can read them. They don't necessarily have to contact me, but if they need my help, I am available.

You just go on the cangetbetter.com website and look under the consultation service. But all 10 articles on Dapsome, how it lowers down the biofilm persistent forms in culture, The tough study showing that we were able to cure Lyme in the mouse model when they failed doxycycline.

And then the eight other studies that, we did about 350 retrospective patients showing memory concentration improved, fatigue improved. Joint pain improved muscle pain, neuropathy improved fever, sweats, chills, Babesia symptoms, mood.

We've published this all over the last 10 years. It's taken me about a decade. to tweak the Dapzone protocol to get it to be eight to nine weeks. And then if it's Bartonella, it is short-term two-week pulses.

Again, the full protocol are written out, apart from Microorganisms September 2023 and the journal Micro Organisms April 2024. When I have three case studies showing how, again, we've reversed the symptoms of chronic Lyme, I had a sub-stack called Medical Detective.

It's free to sign up. The five Bartonella substacks that I did, numbers four and five, have the entire Dapsung protocol written out in detail. And number five is for the two week pulse for active Bartronella.

So I've got all of this out there published for you. Your doctor can access it. If your doctor has any questions, please have them contact me at my email, medical at hvhac.com.

It stands for Hudson Valley Healing Art Center. Thank you. So switching gears a little bit, since Alzheimer's is the fifth leading cause of death in Americans 65 and older, and we also know that Medicare patients have up to seven times higher rates than what is generally reported with Lyme disease, what do you think HHS and the health department should be doing at this point regarding this epidemic and like the pretty blatant link between the two.

Yeah, from my perspective, what HHS needs to be doing at this point, because our Secretary of Health, Kennedy, has really said he doesn't like that medical model we're using.

In fact, root cause medicine, I've not had a chance to speak to him, but I bet based on what I know from Casey Means and people around him. Well, you and I are discussing today root-cause medicine.

I mean, he focuses a lot on diet and exercise, which is great. But we're in the middle of a Lyme epidemic, and the Medicare rates are seven times higher.

So if the CDC is saying 6,000 people, roughly a half a million a year, are getting LyME, it's seven time higher in Medicare. I don't know what that means.

Is that three million people per year in medicare are and we know that Lyme has been associated with Alzheimer's where the rates are 10 times higher and that they're finding on autopsy one quarter of all Alzheimer cases on Autopsy are due to Borrelia burgdorferi Lyne.

What it means for me for HHS is get a randomized multi-center placebo controlled study of Dapsone combination therapy done. and add these Alzheimer's biomarkers with PTAL-181, PTal-217, amyloid-42-40 ratios, neurofilament light, and EPO-E status.

Do these five markers in a randomized multicenter placebo trial. So you're not only looking at how is the fatigue, how was my pain, How is my cognition?

You can measure it with some of the very short measuring like MINICOG. You could measure these things, but now we can before and after. And if you do it in a placebo study, we will not only see how well people do with chronic Lyme, but we'll have an indication whether we can, in fact, reverse inflammation in the brain, right?

Dapsone's blocking NLR-3P inflammasomes, maybe taking down the load of Borrelia in We have a study that absolutely needs to be done. I had submitted an R34 grant last year.

Um, I'm sorry to say it was turned down by the NIH reviewers. So I am not sure Secretary Kennedy knows this. It took me four months working with Eva Garland consulting through my 501C3.

We paid them like $32,000 for me to get this study done and go through all the hoops. They still denied it. I was giving them, it, was a quarter million dollars I was asking for. So now I have to reapply.

And I have certain people I spoke to in the government who are going to look for other funding opportunities, but we've got an Alzheimer's epidemic, we got a Lyme epidemic.

HHS needs to looks at this research that's been published, right? And say, okay, the time has come, let's not put this off. Let's get some reviewers on board basically who say yeah, this is an important study to do.

Research Priorities, Clinical Guidance, and Closing Remarks

Yeah, absolutely. So, what would your final words of advice be to our listeners who either themselves or have a loved one that's suffering from chronic memory, concentration, focus issues?

What sort of workup, I know we've already gone through it, but summarize, What would you recommend they do first and how do they talk to their physician?

So most doctors, they're going to start with simple things like, where should B12 level? Let me check your folic acid. How's your thyroid functions? Do you have hypothyroidism?

They're gonna start it with some of the easy stuff. Get a CBC, a biochem profile. But ultimately what we found in doing this deep dive in the medical literature, is that all 16 MSIDS factors that I've published for chronic Lyme and that are published along COVID are associated with Alzheimer's dementia.

So what you just need to do with your doctor is go through all of these 16 factors, the first six, by the way, of infections, environmental toxins, leaky gut, mast cell activation, microbiome issues, sleep disorders, vitamin mineral deficiencies.

Those are the six. I call them the rivers of inflammation that drive or that cause an ocean of information. You go through those with your doctor piece by piece, and then you look at the 10 downstream effects of the inflammation.

Do I have mitochondrial dysfunction? Which has been, by the way, associated with Alzheimer's. There are doctors out there looking at low dose methylene blue, which we use in the DAPZONE protocol to reverse mitochondria dysfunction because they're finding that some of these Alzheimer patients are getting better supporting the mitochondrion without necessarily trying to pull out beta amyloid.

So you'll look the the Mitochondria. You look at your hormones, you look your thyroid, all of your hormone, by the way, your adrenal, sex hormones. We know that when estradiol goes low in menopause, it affects memory and mood, right?

So that's important to look out. Especially the black box warnings were now taken off recently by HHS because the WHI reanalysis was it was not quite as bad as they thought.

But you looked at neuro issues, psychological issues. Do you have fatty liver? I check any of my patients who have elevated liver functions. I send them for an ultrasound, and many times they come back with fatty liver.

That requires weight loss, but insulin resistance, right, is one of the causes of Alzheimer's dementia, And it's associated with Fatty Liver. Just go through the 16-point MSIDS model with your doctor.

making sure you're getting to sleep, exercising properly, keeping sugar out of your diet, stopping insulin resistance. But the point being, it's not a life sentence.

There are things you can do instead of just going to your doctor and getting drugs like Aricept and Amendo or Licanumab. There's actually something you can do by going through the 16-point MSIDS model, checking these biomarkers, and then using a biofilm persister drug regimen like Dapsone combination therapy.

And the way I've always done medicine is, what would I do for myself or my wife if I had these markers? That's what I would do. My wife at this point is eight years in full remission from the Dapstone protocol.

She was sick for 25 years. So I know that it's possible for people to go into long-term remision, this ridiculous debate as Lyme, a chronic persistent infection has now implanted, right?

It's impacted even the Alzheimer's research and our Alzheimer, this epidemic we're having of Alzheimer also. So it's just time to get a round table together like they did for Lyma a couple of months ago with HHS and look at the data and say, we can do better.

It is an exciting time. And again, for people that are interested in reading about it, This book from Simon and Schuster, Ending Chronic Illness is 640 pages long.

I guarantee you, anyone who doesn't like this book and doesn' think it's useful, please send it back and I will refund your money at this point in time.

You will not believe what I put in this. This book will help you with differential diagnosis. It will tell you if you have resistant neuropathy, why it is there.

If you've got resistant migraines, resistant GI symptoms. Every major chronic disease is analyzed according to the 16-point model showing how all of the factors are there.

And it gives you natural supplements, diet, exercise, natural ways of dealing with it, not just pharmaceuticals. For me, it's the most comprehensive kind of medical tome I've ever created.

It's kind my gift for the world. My gift to all you who are suffering. So I'm kind excited for everyone to read it and tell me what you think. But I think you're going to find it provides clues for chronic illness.

that most people said, well, we can't really do much better. And the fact is, We can do better, so this is about hope, right? It's about Hope and healing.

So I'm really excited to share it with everyone. Um, and the website is can get better for the consultation service, but ending chronic illness.com. If you want to take a look at the book.

Wonderful. In the books should be out by the end of the year. It will be out by October and I'll be starting book tours and speaking engagements. We'll starting soon with Simon and Schuster.

I'm starting to go on a lot of podcasts at this point. Likely based on my talk with Mark Hyman, I'd be flying out to Austin, Texas to do a podcast with Marc about it.

So yeah, be, out there kind of talking to people about what's in the book and, and basically how to use it That's great. And everything that we've talked today, again, it really does apply to all chronic disease.

We're talking about Alzheimer's and we're taking about neuroinflammation, but just think of all of the other neurodegenerative diseases and illnesses that have neuro inflammation as a piece of puzzle for their root cause.

So this can apply ALS and Parkinson's and MS and right and all of these other neuro inflammatory immune dysregulating sort of driven phenomenon in the body.

This isn't just on And chronic fatigue syndrome, myelitis and fibromyalgia share the same symptoms as chronic Lyme as does long COVID, as this mold of fatigue, joint pain, muscle pain sleep disorders, neuropathy,

dysautonomia with POTS, memory concentration problems.

So hold on. If you've been diagnosed with chronic, fatigue fibro, and you have not checked these biomarkers that we're talking about today of neuroinflammation and they're positive, maybe even if your chronic fatigue and fibro was due to herpesvirus 6 or EBV initially, how do you know that Lyme or Bart or mold or other things are not underlying it?

and that this is something you can do to reverse potential cognitive decline later on. I mean, it gives people like a whole new map of looking at whatever your chronic illness is.

We even found with hiatal hernias, Crohn's disease, every GI disease I looked at, we looked to some of the big ones. The GI chapter in this book has a, that's 30 or 35 pages long on SIBO and CIFO and hiatial hernia and Crohns and all these diseases and how the MSIDS factors are underlying what happens to your microbiome, where the vitamin mineral, so it's kind of like when you know this with Lyme, people don't come in with just Lyne disease.

They have all of these overlapping chronic illnesses. This is a way, it is different lens of looking at it. And it's a paradigm shift, right, of how we look at chronic disease and basically keeping us all healthier, hopefully, and happier as the years go on.

So it is exciting. It's not a gift I expected to give to the world. That was an unexpected finding, because when I got the contract from Simon & Schuster, I didn't know that autism had all 16 factors.

I did know the ADD. And I know Crohn's had it. Oh my God, nobody knows this! I need to get this out to world! It is really exciting, it really is. You know, and it's one of the things that I've been saying for years, like if we just focus on killing these organisms and we think that they're the only root cause or, oh, we finally found the root Cause, you know I always say at one time they were the Root Cause.

But now they've changed the terrain, they changed, the cells of every organ, every Organ system in the body. And so now you have to act like a detective and go in and figure out, okay, what of this patient sitting in front of me, what pieces of their puzzle, how has their terrain been altered?

And now all of these things that you find are also now root causes that have to be addressed to able to resolve the infections and reset the immune system in the end.

so that when you're done with your antimicrobials, the infection can't just grow back, right? And we're taking care of all of these viruses that become so high because the immune system isn't, you know, keeping them dormant as they should be once they've gone through their acute phase.

I'm so excited to get your book and to read your books. And it proves my point that I've been talking about for years, that we have to address the whole person, all the pieces of the puzzle, and for you that's that 16-point MSIDS model.

It's just so exciting, so thank you for putting that all together for everybody. It's my pleasure. And again, if you're a patient or doctor listening out there, please speak to your physician today about these biomarkers that we talked about today.

I think very important. Just as again you go for your blood pressure and your cholesterol check, we're in the middle of a dementia epidemic and we specifically chose to label this conference, the Healing Line 3.0, but looking at neuroinflammation and protecting the brain because we now have ways of doing that in ways that just didn't have before.

Thank you for co-hosting. Yes, I really appreciate it, Mariah. Yeah. And, you know, this is such a scary disease and these are really scary statistics.

So to know that there is actually something that you can look at as a marker decades before, the worst part of the

illness and then something you could do about it again, like the message from this should really be hope to all of you that are listening.

Absolutely. Thank you, everyone, for joining us. Thank so much, Dr. Horowitz, and we'll see you soon. Take care. If this episode gave you an answer, brought you new insight, or made you think differently, subscribe to the Lime Bites podcast and share with someone who's ready to take control of their healing journey.

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