Welcome and neuroinflammation overview

Hi everyone. Welcome to the Healing Lyme Summit 3.0. I am your host, Doctor Myriah Hinchey, and I'm here with my co-host, Doctor 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 Horowitz. My pleasure. Good to see you as always. Absolutely. So chronic Lyme disease patients often have inflammation as the underlying cause 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, I have joint aches, I have nerve pain, tingling, numbness, burning, stabbing sensations.

I can fall asleep. I keep waking up in the middle of the night, my can't remember words. I'm 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 and I think 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 that. Probably 80 to 90% of the cases. But B. C. is not too far behind that, probably at least 70 or 80%.

And then, you know, we're also seeing reactivated viruses like some of the long Covid patients have had reactivated Epstein-Barr herpes virus six. But we're also seeing inflammation coming from all toxins from heavy metals.

So inflammation is not just coming from Lyme. But Lyme is one of the major factors that's driving the inflammation. And the reason I wanted to do this summit with you, and 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, 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 the world based by 2060, that are beginning 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 about a couple of cases today, including a case study that I submitted to the Journal of Alzheimer's Disease Case studies.

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

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

But the problem is 15 to 20% of the 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 immuno blot.

It lit up like a Christmas tree. His Bartonella immuno blot was positive. His Bartonella fish was positive. And we just got back all toxins that are off the wall elevated.

So he's got multiple factors driving inflammation. So if you're a line patient and you have chronic Lyme disease, post-treatment Lyme disease syndrome, and you're 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 have it.

Lyme, inflammation, and Alzheimer's connection

And the reason I keep talking always in the last this point couple of decades about the SIDs 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 of years back that even Ciampi and her group discovered, and this is autopsy cases, not live cases, that amyloid P2 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 Lyme disease may be one of the underlying causes. And we'll talk in a second about how frequent I think that is. But the fact is, 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 I've got the codes for everybody today.

So you can listen to this talk and you can kind of write down the codes and speak to your doctor about it. I'll talk to an end just in a second about it.

But instead of doing spinal taps, very invasive. We're going for F-18, Pep scans. You now have the ability to go to quest or LabCorp. And I specifically like Quest Labs a bit better based on the lab quest testing I've gotten.

But you can check markers like ApoE e to see what does your genetic risk of Alzheimer's if it's for for you have a higher genetic risk. You can check a marker called P-Town 217.

This marker is highly associated with beta amyloid in the brain, and has been shown that if you have an elevated P2 17, 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 that was her case. This is a 60 year old woman came to me for 15 years, mild Lyme symptoms.

You know, she had an M rash, was treated, but still had some joint pain. Rheumatoid factors were elevated. And she had she told me her condition she thought was fine.

So over the years we were using Byron White IRBs. We were using Beyond Balance herbs. We were using Cowden herbs. We 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 line patients, and I noticed that over 50% of the patients were starting to test positive for these biomarkers of inflammation.

And I said, would you be willing to do it? She said, sure. So she did the test and her for 2017 was elevated above range. Beta amyloid was normal, but because of the P and because she had a family history of Alzheimer's, although her marker, she was ApoE e3 three and her grandmother had Alzheimer's, she decided to do daptone.

And lo and behold, we saw a lowering down of the tau. 217 three months later. Now 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 can reverse these type of Alzheimer's biomarkers and hopefully prevent

cognitive decline later in life.

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

So I want you to make sure that you and I had a chance to kind of go into this in detail and share it with people. Yeah, I know 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?

Yeah. So the 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 amyloid ratio code, 4240 is 11786 beta amyloid 4240, ratio number 11786P tau 217 that we were describing the number.

The code from quest is number 13825. Again pitch out 217. Number 13825 P-Town 181. The number is number 13690. Again. Number 13690 neuro filament light.

Another marker of neuroinflammation. That quest code is number 13979. It's called NFL Neural Filament light. Number 13979. And if you want to check your genetic markers for eight bogey 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 my patients had already done adoption combination therapy.

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

The 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 peto, they found beta amyloid.

I said, and we know that that zone has great penetration into the brain. The number one effect from DAP shown 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. You know, we didn't. Again, we didn't know she had cognitive issues because she thought her meditation practice was contributing to her her good cognition.

She said to me afterwards, and I put this in the paper that we reported that she found that she was definitely clearer, like the word recall was better.

So what she was assuming was taking good care of herself. I'm meditating, I'm exercising, I'm getting enough sleep. I was like, no, I absolutely see a difference.

Really fascinating. Yeah. So those so those are the markers that you want to speak to your doctor about. And I want 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 Maria. We're going to 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're reporting to the Journal of Alzheimer's Case Studies, that all 16 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'd be discussing it also in my new book from Simon and 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 M6 model are associated.

Biomarkers for Alzheimer's risk and testing codes

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 eight bogey, but check for infections. Do I have chlamydia pneumonia a chlamydia pneumonia is also an intracellular infection that's been associated with Alzheimer's.

Just as Borrelia Bergdorf right. And even then to call a aspire keeps from the mouth each pylori cue fever Cox yellow Brunetti. 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, herpes 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 namenda put me on 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 the 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 ten of them here briefly, I'll talk to you about some time during the talk today.

Three of those patients who finished apps on the PTL levels were fine, and the beta amyloid ratios were completely normal. But in seven of them who never finished capstone, they did have these elevated markers, whether it was beta amyloid, PTL 181, PTL 217, or neuro filament light.

I'll go into some of those cases later. But 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, just like you would check for mold and heavy metals.

And many times we check autoimmune markers like antinuclear antibody, rheumatoid factors, which this woman had. She was not CCP positive. She did not have the autoimmune marker for rheumatoid arthritis.

It was not an autoimmune. It was an autoimmune problem she had from the Lyme, which reversed when she finished the absent. 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 know that Daptone has great penetration into the brain, I need docs out there to start looking at this.

Obviously, the randomized, multicenter study will help us to determine right with longer term follow up to whether

what we found actually is going to hold up right 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, you know, disease process has taken over.

So we can look at these, we can use these to screen. And if we see that they're elevated, we can use them as warning signs. But also a guide as to how to how to help that patient.

So if you do have these markers elevated you should be looking for all of the, you know, Berlioz, all of the co-infections, all of 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 to 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 RPE tau is actually the body's innate defense to trying to deal 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. 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 neuroinflammation and actually start to, you know, 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 tau as well. So as Doctor Horowitz 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 root 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, Doctor Horowitz? No, absolutely. And let me just read this is directly from the article that that I submitted. Let me just show you the 16 factors.

You have a sense of what this is. So we talked about Clemente pneumonia. We talked about Lyme disease driving amyloid production in the brain. Each pylori Cox yellow Brunetti two fever herpes viruses.

So toxoplasmosis, right. One third of the world's population has been exposed to talk. So it's not always active. But if it is active, it's it's been shown to be one of those causes fungal infections, Candida infections Malaysia this other fungal species that have been associated, they actually find these fungal species in the brains of Alzheimer's patients on autopsies, environmental toxins, air pollution like fine particulate matter.

So heavy metals, pesticides have been associated with amyloid production and tau microbiome abnormalities. Decreased diversity and abundance of your beneficial bacteria.

So you could do a GI map. You can do a CD assay. 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 hyper permeability with leaky gut.

You were mentioning the the leaky blood brain barrier. This is also a problem with leaky gut. With or without mast cell activation. Vitamin mineral deficiencies, B12 deficiency, B6, B9, 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 the brain, and beta amyloid and finally, the ten downstream effects on the M6 model that have been associated is mitochondrial dysfunction, hormone and immune dysregulation, autoimmunity.

Liver disease like nonalcoholic steatohepatitis, fatty liver, which is affecting a third of the world's population. It causes insulin resistance, 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 every one of the 16.6 model factors have been associated with Alzheimer's.

So if you do again, these markers, you go to your doctor and you go, I have to be checked for all of these things. And if it turns out that the Lyme is active and you've not used a persistent 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.

Case study: reversing inflammatory markers with treatment

And again, it can be published in the literature. So where can our listeners find that complete list. Well, hopefully this article by the time the 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 and in Chronic Illness. The website is ending Chronic illness.com and the book will be out later this year. But interestingly enough, what we found with the 16 point map is it's not only affecting chronic Lyme patients with PTSD.

We published two years ago that it's associated with long Covid. All 16 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 M6 model is associated with ADHD, with autism spectrum disorder, with allergies and asthma, with the three B's Borrelia, Bartonella, but Busia 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 M. S..

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 the 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 these diseases, which is amazing.

It means we now have the ability to have a paradigm shift. So if you are a line patient who has A. D. D. or you're a mother with Lyme disease, you may have passed on the line 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 nap zone and seen that sometimes the brains do work up in the 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 the 16 factors and exactly how they relate, they will be in the paper that will be published in the Journal of Alzheimer's Case Studies and also an end in chronic illness.

That's amazing. That's such a you know, as I told you, when I first laid eyes on your book, like this book is needs to be a desk top reference for physicians.

And, you know, it's funny, like, as a naturopathic doctor, I mean, your the way that you're approaching this, this is kind of like the way that I was taught, taught to approach really any illness, you know, when you're, when you're working somebody up.

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

So I'm so glad that you have this as a reference for our. Yeah. I mean, when I spoken to natural paths in the past, it seems like I'm more in line with the naturopathic population than I.

Sometimes you are even with my own and but it's in what's so strange about it is, you know, that the health care costs in this country, 18% of our GDP is is health care costs, and 86% of our health care costs are chronic disease.

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

1 in 2 Americans has one chronic disease. Two, I think it's about 25% of Americans have two or more. So we're dealing with a chronic disease epidemic in this country and in the world.

And there's no like 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 that some combination therapy uses a lot of these drugs, but that's not the root cause medicine.

Root cause medicine means you name the disease and get to the underlying 16 factors. So then maybe you still will use some of these medicines. But there's also when I have 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 ad in these patients and the autism spectrum disorder got better and the allergies got better, and the migraines got better, these are all just informed by you didn't get through all the 16 factors.

So instead of just here's your migraine medicine. Right. Oh you you're missing magnesium. You needed you had mitochondrial dysfunction. You needed CoQ10.

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

So you're right. I mean, I, I hope this book gets into the hands of doctors and patients is 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 described not just the pharmaceuticals, but all of the pathways, all the inflammatory pathways. By the way, what's interesting, I didn't mention this.

I found when I was doing the research that even though there are 16 factors underlying all these chronic diseases, including Alzheimer's, there are 16 inflammatory pathways underlying the 16 M6 factors.

So a lot of times you and I have talked about NF kappa. It's one of these inflammatory pathways. Turns on TNF alpha, interleukin one interleukin six IL 17 drives inflammation.

The Nrf2 pathway that lowers inflammation. And in Alzheimer's, this third pathway is called Nlrp3 inflammasome. 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 the brain that turn on a third inflammatory pathway called the NLRB inflammasome.

And you and I have discussed in another episode here how we shut down the NLRB three inflammasome, right. Using low dose naltrexone, low dose melatonin, some of the IRBs you just discussed.

But also that zone is in neuroinflammation inhibitor. So in a study that was done about four years ago in Korea with over 3000 leprosy patients, they followed them for 15 years.

The leprosy patients who took rifampin and DAP zona, which is part of the adaption protocol, that's how I got it. The rates of Alzheimer's disease were like six times less.

If they took taps on the leprosy patients that didn't take that zone, the Alzheimer's rates were off the wall. Now they were suspecting that the reason the Alzheimer's was stopped by DAP zone, right, is because it was acting as an LRP three inflammasome inhibitor.

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

We don't even know how many of the 16 eminence factors they had. But interestingly enough, you hear about all these Alzheimer's drugs. You never hear about that.

So and I had a patient in the Midwest, she's 80 years old. She's one of the ten patients I was going to discuss today. She took 25mg of DAP zone, which for me is almost like homeopathic DAP shown 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 her.

And one of her Alzheimer's markers, or PDL 181, was elevated. And I said to her, listen, you clearly noticed your memory was better from even the low dose zone.

And she's not even noticing a lot of memory issues, but couple of word finding problems, which you might say at 80 years old is normal. But can we do better?

I said to her, listen, you really need to consider doing the higher dose zone. 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 16.6 model to find out what's underlying the inflammation. And then we may have other options.

For some people it may be some combination therapy. This is again one case study, but the first one ever published in the medical literature that we can reverse p tau 2017, which is the most important biomarker that people go on to dementia later on.

So it's it's really exciting information for the line 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? Yeah. It's like even 15 to 20 years later, the PTO 2017, it's 15 to 20 years down the line. So if you're someone who finds it, this is not an immediate like death sentence.

You're going to develop Alzheimer's, but it does mean that you have something going on in your brain, right? You've got inflammation going on and now you got to figure out where the inflammation is coming from.

So again, the standard medical model, which I don't use or you don't use where you name the disease and throw drugs at it, it's about getting to the underlying inflammation. Right.

Where's what are the 16 point m sense factors. And you know what's interesting is Judith McCloskey. Years ago, she's published 4 to 5 articles that there's absolutely no doubt that Lyme has an association with Borrelia.

When they did autopsy studies, they found that line was ten times more frequent, right? When they were looking at these autopsy cases of these Alzheimer's.

So we know that there's 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 ten times more frequent. People had chronic Lyme disease. So you know that the politics, the dysfunctional medical politics of Lyme, unfortunately, you know, is it a chronic, persistent infection?

Is it not a chronic, persistent infection? What causes it? It's hurt the Alzheimer's research also because it is a chronic persistent infection.

Root causes, the 16-factor model, and treatment approach

And if you're going to deny that these biofilm persist, your forms in the brain that create beta amyloid, that increase Peto that are now being talked about for ever.

Shopee's group and doctor McCloskey, it's important to know that there may be. Again, it's one case study. We can't say much, but it's exciting because I didn't know whether I was going to be able to reverse that. Pete out 2017.

It's never been done right. 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 DTaP, someone who said to me my memory improved, you know, maybe in the in the study they did in Korea, it was 100 of them, right.

They treat leprosy with 100, not double dose, 200 not high dose used for Bartonella maybe 100 of DAP shown is all people need. Instead of worrying about the can of Mab in these drugs that are very expensive and shrink your brain and cause brain bleeds.

So there's, there's, I think new things we can talk about here that's really quite exciting. But we chose the Neuroinflammation Brain Protection Summit and talk about this 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 DAPs on pulse. She had Bartonella. I said to me, because she never wants you to do the full protocol. She said, oh, I feel so much better.

I tested her her out to 181. Marker was elevated. She's 50 years old. And I said to her, listen, you got to follow up with your doctor here and finish the protocol and look at the 16 factors.

But, you know, when we go to the doctor and you check your blood pressure and you check your cholesterol, and you go for mammography to rule out breast cancer and colonoscopies and teach you to rest the exams with PSA for prostate.

It's not on the list of things your doctor normally does, which is to say, how is my, how's my PTO 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 message model, which has been published in the literature to be associated with dementia, and then may be considered the nine week oral dapt, some combination therapy and some of the herbs.

Right, Maria, that that you're 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. What? I just doesn't even make common sense to me 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, right?

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 lecanemab is like, you know, we're we're mopping up the floor, but like, we haven't turned the faucet off. That's making the sink overflow.

Exactly. Right. It make it makes no sense to you or me, especially because infections caused beta amyloid. We talked about this in another podcast that the beta amyloid is protective.

Your body is actually creating it to try and shield off the organism. Except the problem is, is it keeps accumulating. It then starts to drive phosphorylated tau and the neuronal connections just don't work overtime. Right.

But but you're right. You 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.

Yeah. So tell our listeners a little bit more about these ten patients, that you're going to talk to us about. And do you want to say anything more about the study and your paper that you've so the main thing about the paper is that when I went through this patient, who is roughly 60 years old, she had never won again, one of the few had never done daptone.

She had an elevated rheumatoid factor with joint pain, but CCP negative. She did not have rheumatoid arthritis. She had an elevated p tao 217 one of the most important markers that, you know, 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. She, her Bartonella hensleigh and Bartonella quintana were positive.

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

So we looked for all these M sets factors, and we dealt with all the factors that we could. And she was doing so well. She would come in once a year. She was at one of these chronically ill patients.

She would come in and go, oh, I got in a car accident. I need a little physical therapy because my knees not working. But she was saying, I'm all stiff, but, you know, I walk every day.

I'm doing great. It wasn't actually until we checked these biomarkers and the detail 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 check the quest Labs. The number of the p tau reversed down to normal first time published in the literature.

The rheumatoid factors now were negative, meaning we reversed peripheral inflammation and theoretically reversed neuroinflammation. Right. So it's it's a really it's an amazing case study because we have proof, for the first time ever, Shopee published 3 or 4 years ago that we're finding beta amyloid pito and biofilms on autopsy.

Patients with Alzheimer's and Parkinson's. But we never had an in vivo person who's alive who took a biofilm, persistent drug regimen like that, some combination therapy and said, well, okay, can we reverse these markers?

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

Again, don't freak out because based on what I've seen, you probably got about a 5050 shot that these markers may come back positive. But just like if your cholesterol is elevated, you're going to get on a diet and exercise program and you might consider a stat new to reduced rice, whatever it is you're going to do.

Bergamo 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 16.6 factor and it's Maria said.

You can check for chlamydia, pneumonia, you can check for H. Pylori, you can check to see if Borelli Bergdorf Frye is active. These are all things that you can do.

And then saying, okay, these biofilm persistent drug regimens. Horowitz has been publishing on them for ten years. I do have a consultation model and 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, right, I am available. You just go on the can get better.com website and look under the consultation service.

But all ten articles on them, how it lowers down the biofilm persist your forms in culture. The tough study showing that we were able to cure Lyme in the mouse model, when they failed oxy cycling and then the eight other studies that we did, about 350 retrospective patients showing that memory concentration, improve fatigue, improve joint pain, improve muscle pain, neuropathy, improve fever, sweats, chills, but busier symptoms.

Mood. We've published this all over the last ten years. It's taken me about a decade to tweak the adaptation protocol to get it to be 8 to 9 weeks, and then if it's Bartonella, it's short term two week pulses.

And again, the full protocol are written out again, apart from microorganisms, September 2023 and the journal microorganisms, April 2024, when I have three case studies showing how, again, we've reversed the symptoms of chronic Lyme, I have a Substack called Medical Detective.

It's free to sign up the five Bartonella Substack that I did, numbers four and five had the entire protocol written out in detail. And number five is for the two week post for active Bartonella.

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

It stands for Hudson Valley Healing Arts 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 the link, like the pretty blatant link between the two?

Yeah, I 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 the medical model.

Using in fact requires medicine. I don't 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 a root cause medicine.

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

So if the CDC is saying 6000 people, roughly a half a million a year are getting Lyme, it's seven times higher in Medicare. I don't know what that means is at 3 million people per year in Medicare are getting Lyme.

And we know that Lyme has been associated with Alzheimer's, where the rates are ten times higher and that they're finding on autopsy. One quarter of all Alzheimer's cases under autopsy are due to Borrelia burgdorferi.

Lyme. What it means for me, for HHS is get a randomized, multicenter, placebo controlled study of dapt some combination therapy done, and add these Alzheimer's biomarkers.

With Peter 181 Peter 217. Amyloid 4240 ratios, neuro filament, light and epi status to these five markers in a randomized, multicenter, placebo trial.

So you're not only looking at how is the fatigue, how is my pain, how is my cognition? You can measure it with, you know, some of the very short measuring like mini cog.

You can measure these things. But now we can measure the biomarkers before and after. And and if you do it in a placebo study, we will not only see how well people do with chronic Lyme, but we will have an indication whether we can in fact reverse inflammation in the brain.

Right. So it's blocking Elara. Inflammation may be taking down the load of Borrelia in the brain. We have a study that absolutely needs to be done.

Research, HHS action, and practical guidance for patients

I had submitted an R 34 grant last year. I'm sorry to say it was turned down by the NIH reviewers. I'm not sure Kennedy Kennedy knows this. It took me four months working with Eva Garland, consulting through my five and one C3.

We paid him 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've got a Lyme epidemic. HHS needs to look 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 said, yeah, this is an important study to do.

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

What sort of work up? 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'll they're going to start with simple things like where's your B12 level. Let me check your folic acid. How's your thyroid function.

Do you have hypothyroidism. They're going to start with some of the easy stuff. Get a CBC, a bio chem profile. But ultimately what we found in doing this deep dive in the medical literature is that all 16 factors that I've published for chronic Lyme and that I published full on 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 inflammation. You go through those with your doctor piece by piece, and then you look at the ten 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 Daptone protocol to reverse mitochondrial dysfunction, because you're finding that some of these Alzheimer's patients are getting better supporting the mitochondria without necessarily trying to pull out beta amyloid.

So you look at the mitochondria, you look at your hormones, you look at your thyroid, all of your hormones, 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 at. Especially the black box warnings were now taken off a recently by HHS because the reanalysis was it was not quite as bad as they thought.

But you look 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 message 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, the Namenda or Lecanemab.

There's actually something you can do by going to the 16 point M6 model, checking these biomarkers, and then using a biofilm, persist your drug regimen like that.

Some 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, I would do.

My wife, at this point is eight years in full remission from the Daptone protocol. She was sick for 25 years. So I know that it's possible for people to go into long term remission.

This ridiculous debate is Lyme. A chronic persistent infection has now implant right. It's impacted even the Alzheimer's research and our Alzheimer's of this epidemic.

We're having Alzheimer's also. So it's just time to get a roundtable together like they did for Lyme a couple of months ago with HHS. And look at the data and say, we can do better.

So it's 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't 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 book.

This book will help you with differential diagnosis. It will tell you if you have resistant properly, why it's there. If you've got resistance, 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, and it's kind of my gift for the world. It's my gift for all of you who are suffering.

So I'm kind of 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. 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 and the book 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 will be starting soon with Simon and Schuster, and I'm starting to get on a lot of podcasts at this point.

Likely based on my talk with Mark Simon, I'll be flying out to Austin, Texas to do a podcast with Mark about it. So yeah, I'll be I'll 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. And you know, we're talking about Alzheimer's and we're talking about neuroinflammation.

But just think of all of the other neurodegenerative diseases and illnesses that are, you know, have neuroinflammation as a piece of the puzzle for their root cause, you know, so this can apply to things like A.l.s.

and Parkinson's and amass and right, and all of these other neuro inflammatory, immune, dis regulating sort of driven phenomenon in the body. This isn't just, this is and chronic fatigue syndrome, myalgic encephalomyelitis and fibromyalgia share the same symptoms as chronic Lyme as does long Covid, as does mold of fatigue, joint pain, muscle pain, sleep disorders, neuropathy disorder, Nami 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 six 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 illnesses we even found with hiatal hernias, Crohn's disease, ulcer, every GI disease I looked at, we looked at some of the big ones.

The GI chapter in this book has a that's 30 or 35 pages long on Sibo and Cf0 and hiatal hernia and Crohn's and all these diseases and how the M sits factors are underlying what happens to your microbiome where to vitamin mineral.

So it's kind of like when you know this wood line people don't come in which has Lyme disease. They have all these overlapping chronic illnesses. This is a way it's a 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 and happier as the years go on.

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

I didn't know that ad, I didn't know that Crohn's had it. It's kind of like, oh my God, nobody knows this. I need to get this out to the world. It's really exciting.

It's really Berlioz, 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 are, 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've

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 be 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 is in, you know, keeping them dormant as they should be once they've gone through their acute phase.

So I'm so excited to get your book and to read your book. And it really like 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, you know?

And for you, that's that 16 point I'm model and it's just so exciting. So thank you for putting that all together for everybody. Oh, 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.

I think 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 we just didn't have before. So thank you for posting.

Yes, I really appreciate it more. 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, you know, the worst part of the illness and then something you can do about it again, like the message from this should really be, hope to all of you that are listening.

So absolutely. Thank you everyone for joining us. Thank you so much, Doctor Horowitz, and we'll see you soon on another episode of the Healing Lyme Summit 3.0.

Take care. Bye bye.