The Hidden Link Between Lyme Disease and Multiple Sclerosis Transcript

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Introduction to Lyme and MS

Hi, and welcome to another episode of the Healing Lyme Summit. I'm your host, Doctor Myriah Hinchey, and today I am so excited about this episode. With Lyme disease being the great imitator and mimicking and possibly being the underlying cause to numerous neuro inflammatory and neuro immune diseases, I feel this summit would not be complete without discussing the intersection of vector borne diseases and multiple sclerosis.

So here to lead the discussion is Doctor Terry Wahls. Doctor Terry Wahls is a clinical professor of medicine, researcher and author renowned for her groundbreaking work on reversing her own MS after being confined to a tilt recline wheelchair.

She developed the Wahls Protocol, which is a researched backed therapeutic lifestyle program centered on nutrient rich foods and functional medicine. Principles.

Her personal journey from severe Ms. to vibrant health has inspired millions of people, and her work focuses on empowering others with chronic autoimmune and neurological conditions to take control of their health.

Doctor Wahls expertise offers a unique blend of silent science, resilience and hope, making her an invaluable guest for today's conversation on the intersection of am us and vector borne disease.

So welcome Dr. Wahls, please tell our audience a little bit about yourself and your story if you don't mind sharing. Sure. So I'm an internal medicine physician, you know, very successful.

And I still have very young kids, age. Eight and five. When I developed weakness, my left leg was out walking, you know, and then I went to see my neurologist who said, you know, sir, this could be bad or really, really bad.

And I began the work up. Now, this back in 2000. It took three weeks. All that was happening. I'm, lay in bed thinking about the fact I've already had 20 years of worsening electoral pain due to trigeminal neuralgia.

Terry Wahls' MS Diagnosis and Decline

And so I know I've got a progressive illness. I actually am secretly hoping for a fatal diagnosis because I don't want to become disabled. So three weeks later, I get I have all the MRIs, nerve conduction velocity tests, lots of blood tests, a spinal tap, and I've told it's multiple sclerosis.

I start reading the literature and I just really get upset because I see it's, you know, Ms. is a progressive disease. My wife convinces me to stop reading the literature, says Terry.

You're just getting yourself upset. We'll find the best MSA in the country and go there. So we did a research, found the best MSA center, went there, to their best physician, took the newest drugs, and within three years, at age 48, I mean, that's what we clean wheelchair.

I take, my desire to try on a form of chemotherapy. Have neutropenia three times, but I've continuing to go downhill. So they stop that I take tysabri.

We're all very excited about that. I continue to go downhill, and then Tysabri is pulled from the market and I've switched to a drug called cells up again, another immune suppressant.

And that's when I decide, okay, I know how bad this is going to be. Really terrible. I'm on track for it. Become bedridden and so I go back to. In the basic science aside, mitochondrial dysfunction is what drives this ability.

And I create a supplement cocktail, the hub. So I fatigue just a little bit, but I'm really grateful for that little because my mind is so clear, my hands still work, and it slows my decline in 2007 and begin to have some brain fog.

My chief of staff calls me into his office, tells me, reassign me to the traumatic brain clinic. I'll start there in January. There'll be no residents.

I'll be examined. The patients as part of a multidisciplinary team. I go home and tell Jack and he says, there's no way you can do that job. And I'm like, yeah, I know.

And come January, I have to go do this, and either I can do it or I can't, and then I have to apply for a medical disability. So I'm pretty upset. And then two weeks later, I discover a study using electrical stimulation of muscles in people who are paralyzed, who are never going to walk.

And I think, So I convinced my physical therapist to give me a test session. Hurts really bad, but when it's over, I feel great. So we add the electrical stimulation of muscles to my little tiny workouts that I'm doing.

And then shortly after that, I discovered the Institute for Functional Medicine. And they have a course on neuro protection. And I take that, which was was pretty hard the midst of my brain fog.

But I have a longer list of supplements and then I have a really big Finally, and I laugh at myself for how long it took to have this. Like, what if I redesigned the paleo diet that I've been doing already for five years?

Based on this long list of supplements? So that's more research to figure out where these nutrients are in the food supply. And now I have a very structured paleo diet, and I start this December 26, 2007, January 2nd.

I start in the Ranger clinic. The first two weeks I just watch my partners. The third week I have to start doing the exact and by the end of the week I, tell Jack, you know, I think I can do this.

And by the way, how could I sit in a regular chair, for supper? And I should tell everyone at this time, you know, back in December 26th, when I started.

I'm so weak, I cannot sit up in a regular chair. I'm in a zero gravity chair with my knees higher than my nose. That's how I work. That's how I take my meals and spend time with my family.

I can take a couple steps with two walking sticks and be near brain fog. My trigeminal neuralgia is relentlessly worse, more difficult to turn off. It is very, very clear to me I'm on track to become bedridden by my illness, probably very, very soon.

Demented by me. Illness because of the brain fog and die with intractable, horrific pain because my treadmill analogy is so difficult to turn off, right?

Very grim future. So, you know, and I'm going to have to take retirement. So I'll go do a job that I can't do. So January comes, I start this new job, and it turns out I can do this.

Yeah. And then my physical therapist says, you know, the next week, you know, it's her. You really are stronger. I'm going to advance you exercises and have you start doing them.

You know, twice a day. And then in a couple more months. Now this is stunning. I start walking at the hospital with two walking sticks and then with none.

And then on Mother's Day, we have to have this emergency family meeting because I want to try riding my bike for the first time in six years. So Jackie tells my 16 year old son Zach, you alongside in the left, my 13 year old daughter that you met alongside in the right and she'll follow.

We all get into position. And I ride. I ride my bike. My dad in that big six year old boy, he's crying.

Functional Medicine and Recovery

Zeb is crying, Jake. He's crying. I'm crying. Could tell I still cry when I relive that moment, because that's when I. I understood, like what might be possible and I, you know, keep writing a little bit more.

And then in October, we do the carriage ride, which is 18.5 miles. And, you know, I crossed that finish line once again, we're all crying. And this really changes how we think about disease and health.

It will change the way I practice medicine, but it will change the research that I do. And I made it my mission to teach the clinicians how to use my protocol and others to change, to do the research, to change the standard of care.

And I've made it my mission to teach the millions of people worldwide who have multiple sclerosis and have other chronic diseases, that yes, there is so much that you can do to change the course of your life.

That is such an amazingly powerful story. Thank you sincerely. Thank you so much for sharing that with us. It's truly amazing. And the amount, the short amount of time in which which I'm sure for you it felt like forever.

But the short amount of time in which using your food as medicine turned everything around is just mind blowing. And that's coming from a naturopathic doctor who believes that food is magic.

So, you know, I've been trying to get a natural ethics school to give me an honorary, naturopathy degree, so I might not be able to do that. But I'm like, you know, I, I sort of feel like a I'm sort of a natural path at heart. Now.

Yeah, yeah. That's powerful. Thank you. Thank you so much for sharing. So for part of, you know, for this being a Lyme disease summit, there might be a lot of listeners here that honestly don't even know what I'm asking is.

Sure. Can you share what the typical I mean, I obviously you just illustrated a pretty severely did teria rating, you know route that Ms. can go. What you have is an episode of neurologic symptoms and to make the mistake gnosis you have episode one and that is clinically isolated syndrome where there's an enhancing lesion in the brain.

And neurologic symptoms which may be sensory or motor or, you know, brainstem kind of issues. And then they'll do a spinal tap, see if there's evidence of, previous problems.

It's looking for oligo bands. And then they watch and wait when there's a second episode in a different location of the brain. So you have to have two episodes separated by time and space.

Then the diagnosis of multiple sclerosis is made, but there's a huge differential that you have to think about. And so your specialist should be looking at other autoimmune diagnoses, looking at infections, and then make the decision that you've they could exclude all these other autoimmune diagnoses, exclude the infections and then say okay based on that you meet diagnostic criteria.

It's called the MacDonalds criteria. And then we will begin treatment with the disease modifying agent. And those are typical and typically immunosuppressant biologic.

All the they will suppress your immune system in some capacity to prevent and to get approval from the FDA, the drug has to show that you're reducing the number of new enhancing lesions and reducing or reducing the number of relapses compared to the control.

And so the the drugs do a really good job right now of turning off the immune system and suppressing the development of new enhancing lesions. They lengthen the time to needing a wheelchair by five years, but they don't stop the conversion to the progressive phase of the illness.

They don't stop the accumulation of disability. They don't stop the job loss because of anxiety, depression, brain fog. They give you more time, which is very helpful.

You know, in my practice and those functional medicine docs who are trained in functional medicine that also take care of autoimmunity, we help people address the modifiable lifestyle factors, the nutritional toxin, infectious, the contributing factors, and often in collaboration with whoever's using the disease modifying treatment prescription.

We're able to get people into a great place where they're doing really well, and then they can transition to a less potent with fewer side effects, DMT, and then you tell the person they may stay, or something like Copaxone, which is a much gentler, much less risk of telling you disease modifying treatment.

And some people are able to get entirely off their DMT, but it has to be done, you know, in a very thoughtful way, because if you abruptly stop a DMT, you'll have a severe rebound and really a disaster.

So you have to do it very thoughtfully. So for our listeners that don't know what a DMT is, could you. Oh yeah. So that's a potent drug that it's really turned off your immune system.

You think things like, tysabri. I would be the classic, which is very been very effective at reducing the number of new enhancing lesions, reducing the relapse rate.

But if you stopped abruptly, then you're going to see a severe rebound, a severe flare. I was going to say so for patients that don't necessarily understand the link, can you talk a little bit about how the immune system could potentially cause these lesions, you know, that are one of the main physical findings and, you know, I'm going to go back to what is what do we know about why you get Ms..

There are about 300 different genes that increase the risk just a little bit for the vast majority. And I'm talking like, 1% increase, maybe 2% increase.

There are a handful of genes that might increase it as much as 10%, but the vast majority, it's really small. So you have to have the genetics that make you vulnerable.

Step two is an infection.

Understanding MS Diagnosis and DMTs

And there are 16 different organisms that increase the risk of developing Ms., and the tick borne, vector borne microbes are part of that coronavirus.

The recent pandemic is part of that. So anyway, we've got 16 organisms that we know increase the risk, Epstein-Barr virus being one of them. But the vast majority of people can handle those microbes and never get autoimmunity.

There's this next step, which is we don't really get it. That's with conventional dogs, we'll say. So they just focus on the DMT. Is the people like me.

We say, okay, so we're going to address all the environmental factors we address nutrition, toxin exposure, life purpose, connection with others, reduce loneliness, moderate exercise, stress management six your nutrition address.

Investigate your microbiome and what we see us as we what people do that step by step. Some people can do it all right. You know rapidly. Some folks have to do little steps by steps.

And what we see is energy improves the number of new lesions, goes down, the brain scans look better and better. The person's getting stronger, mentally clear.

They're less irritable, less cranky. Their blood pressure is improving, their blood sugars improving. If they're overweight, they're losing weight without being hungry.

They discover that they're much more interested, as, my vets would say in relations with the spouse that, code for they want to have sex again. And so they get their lives back, and then they're engaging in conversations with their, specialists.

Like, you know what? I'd like to try transitioning to, a a DMT that is a little less toxic. And when people are doing well, they're not just like, you know what?

I think that would be okay. And so over time, my ideas, which in 2008, 2009 were incredibly scary and frightening to the Ms. specialist, are now being embraced more and more.

And when we go to our scientific meetings, presenting our research and doing oral presentations at these major international Ms. conferences, my ideas are not so crazy anymore.

My research is celebrated. We're being heralded for the important role that we've had in driving the research on nutrition and the impact of nutrition on symptoms and disease course.

So it sounds like you are using all of the nutritional and lifestyle modifications that we know of that are able to lower inflammation and help to reverse immune dysfunction.

And that's a big piece of how you're able to get your, your patients into, like this remission and yourself as well, you know, and, you know, when I'm teaching for, IFM, a program, we talk about the role of the micro glia, the astrocytes, your tender sites and the neurons in the brain.

And that there's a lot of research trying to billions being spent to figure out how to improve myelination. So all going to fail that those drugs work great in mice.

They're going to fail because you have to address the modifiable lifestyle factors. If you address the modifiable lifestyle factors, then the microglia will calm down.

Then the astrocytes can nourish the brain, then the oligodendrocytes can repair the mind. If you focus on lifestyle medicine and that's what we see. We see people who are profoundly disabled.

I think you have the young woman who actually woman in her 50s with progressive Ms.. So disabled that she was struggling to transfer independently from her wheelchair to the toilet, from her wheelchair into bed.

She could stand for a few seconds, couldn't take any steps. She discovered my work, began taking every course that I offered because she wanted to have the chance to do the live Q&A, and over a three year period, she got, she could stand for 30s, stand for 90s, stand and take a step with the walker stand and take several steps with her walker.

Begin walking with a walker and now her goal is to walk with her dog on the beach. Three years prior to that, her goal was to keep doing the transfers independently, keep being able to y prod.

But at the toilet? Yeah, it's amazing. Now her goal is walking on the beach with her dogs and this was all lifestyle medicine with her and her neurologist.

It's like, man, whatever you are doing, keep it up. Right? Right. At that point, yeah, just keep doing it. So Terry, you mentioned right, that tick borne diseases could be one of the 16 underlying causes.

Do you have a sense for how often they might be one of the underlying causes? And as far as you're concerned, you know, is this something that you focus on, you know, helping people to identify?

Infections, Lyme, and Immune Dysfunction

Do you feel like in addition to doing the lifestyle work, if there is an underlying infection that's driving it, I would

imagine that it's got to be important to help to get that infection out of the body or into remission in order to not cause, you know, further advancement of the disease.

So I certainly we talk about the genetic predisposition, the microbes, and I stress that modifiable lifestyle factors, are key. And if the person has concerns for, tick borne illnesses, I want them to find a clinician that has expertise and all of that.

I certainly acknowledge that. I do not. What is interesting is that I've had people who have come to me who've been told that they have a tick borne illness, have taken a wide variety of, traditional anti-microbial drugs and have not done that well, still are suffering.

And now, of course, they have terrible microbiome. And so I begin work with them remediating the microbiome, really addressing lifestyle medicine. And they perk up. They're like, oh my God.

And so the it's it's really pretty interesting. I sort of have had a number of Lyme patients come to me who have been treated with pharmacologic drugs for their Lyme disease, still struggling, not doing well.

I focus on fixing their microbiome, fixing lifestyle medicine, and now they are doing fabulous. So, you know, I certainly it's I'm not a Lyme expert. I want people to work with a person who who has been trained.

I believe you're a big fan of eyelids. You know, I think that's, you know, find someone who's certainly more knowledgeable. Yeah, 100%. Do you have any idea of the incidence of Lyme and tick borne disease in the US population?

I do not. Okay. And I don't either. That's something that maybe, I will gather and get to our listeners as. I mean, I think that would be, super interesting.

I think it would be hard to get a really good number on that because I don't I don't know how reliably, the neurology community is excluding because I want your listeners to know, in the initial diagnostic workup, there is a large, large number of other autoimmune diseases that have to be considered.

And then these, infections that have to be considered, and so your neurologist should have considered, the tick borne illnesses in the initial diagnostic workup.

Now, they may not be as knowledgeable as your eyelids. Trained practitioners on how to thoroughly investigate the question, are tick borne infections really at the root cause?

That is part of the workup for that initial diagnosis. Right. And as we just discussed on your summit when you interviewed me, you know, the testing out there.

And so, you know, most neurologists are going to be using, you know, this conventional testing, you know, two tiered model that is not looking at all of the species of Borrelia that cause Lyme and tick borne relapsing fever. They're not looking for any of the co-infections like the BS, the Bartonella, etc..

And so a lot of times they're not. It's just going to get ruled out. And, and a lot of times I would assume it's definitely a false negative. And so we're missing that piece of the puzzle.

We, that is absolutely, absolutely correct. It is part of the initial workup. The your specialist has been trained that has to be considered and ruled out, and they will be using their conventional laboratory testing, the, you know, quest lab core or the testing within their hospital system.

You know, here at the university, they would be using that initial testing. And furthermore, they, probably not sending you to an infectious disease person or specialist to look at that thoroughly either.

It's always just going to say workup that you're supposed to go for. And I mean, unfortunately with infectious

disease, I hate to say it, but they're using the same tests.

You know, it's kind of the specialty that you would expect to be on top of this. Unfortunately, isn't using any better diagnostic criteria or testing, you know, than the same line illiterate physician or clinician is using.

But, Terry, what I love about everything that you're saying. So you and I are so aligned in our approach, like your approach to amass and my approach to healing Lyme disease are very, very similar.

You know, I believe that really the crux of the immune system's ability to function properly relies in the gulfs, right, and in the guts and the Gulf and on our microbiome.

And when we are using, you know, heavy duty, long term antibiotics that are damaging our microbiome, it really sets us up for massive inflammation and immune dysfunction, the inability to detoxify.

And it's a huge, huge slippery slope that tends to make people sicker. So, I love that you look at go ahead. The other thing that I want to comment on, based on some microbiome studies of indigenous women and the their oral microbiome, their your microbiome, and then the microbiome of their kids, they have a different microbiome than we do.

Their microbiome provides much more robust infection. Infection, protection against meningitis, against tick borne illnesses, against a variety of these infections that are a scourge today because they have the microbes in their gut that are protective.

If you have a C-section, you don't get those microbes.

Microbiome, Birth, and Infection Risk

If your infant has early antibiotics because you had a complicated birth or early infections, you're killing off those protective microbes. And therefore, as a population, we are getting more and more vulnerable to these infections because we don't have the microbes that were essential to human health over millions of generations.

Yes. It's so true. I think most people do not realize that our immune systems are set up from us swallowing and being slathered with all of the microbiome that is in our mothers vaginas.

When we come out and our and are born, and when we are pulled out through C-section and we get the flora that's on the skin as kind of like the first inoculation, and then you're getting everything else that tends to be like in the room or, you know, whatever.

It's it's not setting the microbiome up the way that it should be set up for proper immune function, much less digestion or, or anything else. So that's such a great point.

And it's something that I think most humans do not know. Correct? Correct. And we don't we don't understand that. Now, certainly antibiotics, can have been lifesaving.

C-sections have been life saving. The vagina is life saving. And so it's super interesting. There has been a move in some hospital, some circumstances, to swab the woman's vagina and slather the baby as soon as it comes out through C-section with mom's vaginal secretions.

Super exciting stuff. Fortunately, when my grandson was born, he was able to come out, mom's vagina. So I was thrilled about that. Good. So, Terri, tell us a little bit more, if you don't mind.

A little bit more detailed about, you know, your, your plan, your nutritional plan and what that entails. So it's really about some pretty basic concepts you need to play a protein.

And I'm getting that actually, right now I'm eating a lot of grass finished bison, pastured pork, pastured beef,

pasture chicken, wild fish, and some farmed fish.

Here in Western Iowa, non-starchy vegetables. And people know with, advocate for nine cups. Green leaf is, sulfur rich cabbage, onion, mushroom family in deeply colored beets, carrots, berries.

And I advocate for nine cups because my clinical practice was in the Bay area, didn't want people to be hungry. And my vets would say like, okay, nine cups, is that per week or month?

And we'd last? No, no, that's per day. Those are cooking demonstrations to help them, understand that, also, I'm very keen on fermented foods. My goal is to have, a cup and a half to two cups of sauerkraut or kimchi.

Every day. Nut milk, coconut milk, yogurts and kiefer's, seaweed, algae. And, over time, they became more and more ketogenic. So presently, I, have more fat, but a lot of olive oil and fewer carbs because I'm on a ketogenic diet.

I will confess there is four weeks out of the year when my papa and persimmons are ripe. I'll have more papaya and persimmons. So I go out of ketosis. I, the papas are down, the persimmons are down.

So I'm back into ketosis. Okay. And do you find following more of like a ketogenic version actually makes you feel better? Or do you just do it more for preventative measures?

I'd say both. I had early antibiotics, so, I was born in 55. At that time, breastfeeding was, not, popular in fashion, not in fashion. So I got, formula.

I had early, tonsillitis. And so I was given a lot of penicillin, which I'm grateful for. I didn't want to have a heart disease. So, you know, that was good.

But it also messed with my microbiome, so I probably had yeast overgrowth and since that adolescent, I have struggled with depression in a really big way.

Wahls Protocol and Lifestyle Treatment

I've since discovered exercise. And a ketogenic diet really does great things for my mood. When I had my pores, pals and persimmons. I'm out of ketosis, but I don't have that many, so it's still a pretty low carb diet.

Then, you know, I I'm back into ketosis, and if I'm not exercising, if I have too many carbs, my depression is much more severe. Yeah, it's amazing how much food impacts our mental health.

Yeah, absolutely. So, Terry, share with our listeners. You know, if someone is suspecting, especially after listening to this, that perhaps they have Ms..

On top of having a tick borne disease, or maybe they think they have amassed an STD. Where would you refer them to to find out what you would consider to be kind of like true information regarding Ms..

Well, if you have Ms.. There's separately, diagnostic criteria and ideally I would have you go see Ms.. Specialist there aren't that many. So you may have to if you're in rural America, you, may be lucky to have a neurologist.

And there are specific diagnostic criteria. Do you have Ms. or not? And then that makes you eligible for getting these very potent, very expensive, like $100,000 a year?

Yeah. Disease modifying treatments. And depending on how many lesions you have, the location, the severity of symptoms, I certainly would encourage you.

Yes. Take those DMT at the same time, it's critical to begin implementing diet and lifestyle because the DMT is do a good job of stopping the new lesions, stopping the relapses.

But they don't prevent the slow progression. And that's about the underlying mitochondrial dysfunction. The underlying microglia activation. And you can calm that by targeted supplements.

Better sleep better nutrition, gradual increase of exercise connection with others, purpose in life. So we want you to find a clinician that can help you bit by bit, make those optimal lifestyle choices.

And you know, if you come to a person, you know, in one of my clinical trials, we're going to help you make those choices much more rapidly. If you come work with a functional medicine training person and a health coach, then we'll work at making small, achievable steps one after another to get to the goals that you've set out for us.

So how would somebody find you and or one of your clinical trials if they wanted to work with you? Well, so clinical trials, you go to Terry walsh.com/trials.

And you'll see we have trials for people right now with a chronic Lyme fibromyalgia. We're recruiting for those. Do we have a patient registry for everyone.

So, I invite everyone on your summit to sign up for our trials page because you'll see the patient registry. You could be part of that. And then if you want to come see the various classes that we have become, the three walls.com. And look at programs.

We have a bunch of programs and we product. So do you want to get on my email list. So you'll get notified with the next class because we have live Q&A sessions and we certainly have people, who come discover me, sign up for every class that I do because they so find so much value in the live Q&A.

Yeah. So where would we go to find that Terry Walls, Terry Walsh swa hls.com and then if you want to get so there you see the programs for the classes upcoming.

And then again if you want to come to my clinical trials Terry walls.com/trials, there'll be a place for you to learn more and to sign up. Okay. Wonderful.

So any parting words for our listeners before we wrap up? You know, I think the key messages I was profoundly disabled.

Finding Resources and Final Encouragement

I had a terrible, terrible future ahead of me. I kept doing what I could a little bit by bit by bit. And eventually, you know, I turned everything around.

I, I love strengthened training, I am jogging. If I can come back from such profound disability when I could not sit up, could take only a couple steps to jogging.

Right. There's hope for you. Thank you. You are an inspiration. Seriously to everybody. Thank you so much for your work and thank you for not giving up.

And thank you for instilling hope in everybody listening to this program right now. It's been a true honor to interview you and thank you for being here.

Thank you and much love to you for all the work that you do as well. Thank you. Terry.