Still Struggling with Lyme? This Treatment Might Be the Game Changer Transcript

(Transcripts are generated by AI and may contain errors)

Introduction to Lyme Disease History

First thing is the treatment doesn't work. And second thing is the post-lime syndrome is not post-lime, it still is lime. So that was the second thing.

So then how do we treat this thing? So what McDonald did was he teamed up a local dermatologist, Dr. Bernard Berger, and he took patients who had the rhime rash, the erythema margarine's rash, and they biopsied the edge of it and cultured living spirochetes from it, and then tested it against different antibiotics.

Pretty cool. They found that doxycycline was better than tetracycline and amoxicillin was better than penicillin. And so that's how that whole thing got started.

This is Doctor Talks, real talk from real doctors on the issues that matter to you most. Today on Lime Bites, we're joined by a true legend in the field of Lyme disease, Dr.

Joseph Burascano, a board certified physician, pioneering researcher, and one of the original founders of ILADS, the International Lyme and Associated Diseases Society.

Dr. Burascano is perhaps best known for writing the original treatment guidelines for Lyme disease, which decades later continue to guide clinicians around the world who are treating complex chronic cases.

His voice has been instrumental in advocating for deeper scientific inquiry, more accurate testing, and patient-centered care, especially in the face of one of the most heated and enduring medical controversies of our time.

In this episode, we'll explore the history of Lyme, how the landscape has evolved, and what hasn't changed. We'll also dive into the ongoing divide between conventional and integrative approaches and what it will take to bridge that gap.

Welcome to Limebice. Let the healing journey begin. And welcome, Dr. Burasano. Thank you so much for joining us. Oh, you're welcome. I'm happy to be here.

Nice to speak to you again. Great to see you as always. So, you know, it's funny. I was trying to go back in a point and it's like, where does the history of Lyme disease begin?

Because, you know, it didn't begin when it was discovered. So I think that's my first question. When did Lyme disease begin? When did Borrelia, you know, emerge onto this planet?

Origins and Early Recognition of Lyme

Well, you know, you have to go back to the early European literature because in the late 1800s, they started to describe parts of what we see as Lyme disease.

They described, starting with the Biz I rash that was associated with arthritis and with neuropsychiatric symptoms and a more chronic rash called ACA.

And then later on, they determined it was associated with tick bites. This is, you know, around 100 years ago, more or less. So Lyme is really not new.

It's definitely been around a long time. And different Borrelia have been found, for example, in mummies 5,000 years ago. That was a relapsing fever Borrelia, from what I understand.

But nevertheless, the disease has been around. Now in America, it was, quotes, discovered in 1975, roughly, when Pauli Murray finally got to CDC to send someone to examine a whole bunch of cases of neuropsychiatric symptoms, Bell's palsy, and arthritis.

It was a cluster in the neighborhood, adults and children. And that's when America is Lyme, Connecticut, and that's how it got its name. So yeah, American Lyme dates back to 1970s, but really goes back much further than that.

And so why do you think the cases of Lyme disease are literally exploding? It's the fastest epidemic that we've ever seen. Why do you think that is? A lot of different reasons.

Part of it is more recognition, but also part of it is that the vector, the tick, is expanding in its range. People are expanding into the ticks range.

And it's expanding population in general. So more and more cases are being reported and actually happening. You think it's something that like we need as, you know, as the human race have kind of been living with all along and by the alterations like in our microbiome, in our immune system, increasing toxicities like in our worlds, you know, genetic modification of food, all of these things that make us sicker and weaker.

Do you have any opinion as to whether or not like almost like a weakened terrain in the body allows it to to thrive more and and that's why it's more of an issue now.

I think that's part of it, but you know. When I first started seeing patients that didn't know what they had, but later on turned out to be Lyme, they were diagnosed by others as having MS, multiple sclerosis, atypical rheumatoid arthritis, atypical lupus, atypical MS.

I mean, I said that right, but atypical a lot of things. Children who had developmental disabilities, learning disabilities, adults who became demented.

And so they're given different labels and less we have a more toxic environment nowadays. But, you know, if you go back to the 1800s in this country and around the world, people's life expectancy is almost half of what it is now.

And they had all sorts of horrible things happening to them. And they had a lot of, you know, snakewalled drugs and injuries and other things that reek of them.

So Borrelia have been around a long time. And it's my theory that if you go back to the history of Lewis and Clark Expedition, read about the health issues that they faced.

And one of them, I'm sure, had tick-borne diseases. Be that as it may, yes, nowadays the human terrain is lacking because of all the things that you mentioned.

And I think that's causing an increase in numbers of lime. But I think it might be increasing the numbers of chronic lime and difficult to treat lime.

Yeah, that's a good distinction to make, right, between acute Lyme cases and chronic Lyme that we see, chronic vector-borne disease. How has Lyme evolved over the past, what is it now, 50 years since it was first discovered, since Borrelia was named?

Well, we can go into some history in America, which is kind of interesting.

Discovery of Borrelia and Early Treatment Failures

You know, I lived it. So when Long was first targeted by the government in the mid-70s after Pauli Murray called them in, they sent a rheumatologist and immunologist to look at these cases.

And the people had arthritis, so naturally the rheumatologist thought it was a rheumatologic disease. And they

thought, well, it should be treated with aspirin and maybe steroids, and it'll go away.

Well, when it did do that, they said, well, maybe it's a virus. So in the early 1980s, Wille Bergdorfer, who's a tick researcher from NIH, came to, actually, Eastern Lune Island, which is about 25 miles south of Lyme, Connecticut, along a board flyway, by the way.

And he collected ticks, and he found the spirochete that named after him, Bruellerbergdorferi, and that, therefore, became the, quote, the cause of Lyme disease.

So now that it was the spirochete, now what do you do? Nobody knew what to do. So they said, well, let's get some treatment like you would give syphilis.

So they gave 10 days for penicillin or 10 days for tetracycline. An interesting thing happened. They defined Lyme as having major and minor symptoms. The major symptoms were the Bell's palsy, the carditis, which is a heart block, and in some cases, a rheumatoid type of arthritis, for example, swollen knee with water on it, inflammation, and so forth.

And they found that if they're giving 10 days of these short mild antibiotics, those major symptoms went away, but the patients were left with what they called minor symptoms, the encephalitis, the fatigue, the headaches, the flu, like everything else.

Now, being that they were not infectious disease specialists, they could not imagine an infection persisting despite those treatments, so they called it a post-lime syndrome.

So the first mistake goes to me is that once Lyme was recognized as being an infection, the focus shifted from the rheumatologic branch of the government to the infectious disease branch, but that never happened and still does not exist to this very day.

The chronic Lyme, the symptoms that bother people the most, what they call the post-Lyme syndrome, and it's nothing that they can define. There's no test that proves it.

It's a theory, not a reality. But my research back then, with the help of the genius Alan McDonald, who's helped the culture of Borrelia spirochetes from the sick patients, I found that these people didn't have post-Lyme syndrome.

They were still infected. They still had positive blood cultures. There's no post-Lyme. It was Lyme, but still. And that's kind of where the divide began, because the government, the universities, and so forth kept embracing the idea that Lyme was a simple illness, usually treated, and everything else was some loose syndrome that miraculously occurred out of nowhere.

But the problem is, it's a case of definition. How do you define Lyme disease? Well, the major symptoms of Lyme, the carditis, the Bell's Palsy, the rheumatoid form of arthritis, if you could see his early work before he even figured all this out back in the early, I should say the mid to late 1970s, These major symptoms, even without treating them, would more or less resolve.

Bell's palsy stays in someone only 5% of the time. Likewise, alarm carditis. People with Lyme major arthritis, it will go away and then maybe come back later on, but it will go away on its own.

So his thinking that the tinder is a simple treatment he gave cured Lyme because the major symptoms weren't away. They would have gone away anyway, or at least minimized to the point where he saw it as successful.

Other problem was that they were not a medical clinic. They didn't have people come back and follow. I was in primary care doctor. People come to me with these symptoms and they went, they treated once and seen once and put in some database and never to be seen again.

So you never have the long-term follow-up that we in the front line always had. So again, the definition of Lyme and

what is Lyme sort of broke apart in the very, very early days of Lyme and has never been repaired.

Thankfully, the groups that IRADS and other organizations that are physician and patient supported and focused are pushing forward the idea that Lyme is much more than a simple illness and is much more than a cure of 10 days of simple treatments.

What do you think further fueled that divide? Because I mean, if anyone I think that knows about Lyme disease or chronic Lyme disease these days really understands very quickly that this is a medical political disease.

Yeah. No, Jerusalem would not really know. I mean, in the early days, the same researchers who defined this narrow definition of Lyme, they have financial interests, they have patents, they have clinics, they have all sorts of things that are still active to this day, and maybe it's financial, maybe it's You know, they sort of back themselves in corner with their narrow definition and their reputations are on the line.

So they don't want to change that. I don't really know. A separate problem but also related is that when it comes to treatment, you know, we're managed nowadays, medical care is managed more or less by the pharmaceutical industry.

And because we don't have a drug that's patented, and on formulary by the big companies that they can make a lot of money on for Lyme. Now it's interested in studying Lyme with tetracycline or doxycycline or amoxicillin, you know, and that's part of the problem.

Chronic Lyme, Seronegativity, and Longer Treatment

Research in this country and a lot of places around the world are fueled by pharmaceutical financial interests. Well, I mean, that's true. And if you look at a lot of the diseases that Lyme mimics, or can bring on or accelerate the symptoms of, you know, a lot of those diseases, their pharmaceutical management for that person for the rest of their lives are, you know, sometimes over hundreds of thousands of dollars a year.

Of course, it's managing the illness or the symptoms and not getting rid of it or curing it. So how did you get started in all of this? I know you were an internist.

You started seeing patients that were symptomatic of Lyme and whatnot. But tell us what your role was way back in the beginning, because you were treating this before anyone even knew what it was, right?

I started practice in an area that was later found to have the highest case rate of Lyme in the world. That was Eastern Long Island. And they did surveys where they collected ticks and analyzed them.

And between 80% and 100% of the ticks had living Borrelia in them. So it was a real hotspot. But you know, I was in practice a few years before this whole thing became public.

And I had seen a lot of these so-called atypical patients, you know, atypical rheumatoid things. and they just didn't fit, and they were being seen by the rheumatologists, and they couldn't figure it out, and they tried rheumatologic methods and so forth, and they just didn't work right, or they had opposite effects of what they expected.

So where came Alan McDonald? And he called me up and he said, you know those chronic patients of yours? I was able to culture a Borrelia from them. That's Lyme disease.

I said, oh wow, tell me more. McDonald, Alan McDonald, Dr. Alan McDonald is a pathologist. He was on staff at the local hospital I sent my patients to.

And what he did was he discovered a ray of seeing the spirochetes in the blood and then culturing them and proving that they were living spirochetes. And that, like his critics said, cytoplasmic strands or some other weird thing.

And so first of all, I saw these patients who had these multi-system illnesses that were poorly defined. Back in the early to mid-1980s, once they discovered Lyme being a spirochial illness, simple blood tests, maybe IFA-type serologies, were developed.

Now, suppose they diagnosed a test for these infections. So these atypical patients of mine would have the blood test, and some showed positive, but some did not.

And even those who did not were positive on McDonald's culture. And, you know, I'd go to his hospital, to his laboratory after work on the way home. I'd look in his microscope and see them.

I mean, there they are. You can't say no. And so I found, well, these people were seronegative. So that was the beginning of the concept of seronegativity.

People had the infection. I saw it with my own eyes. I cultured it out. But the blood test was negative. That was shocking. The health department made these blood tests, and they were shocked that I could say such a thing.

So what are we going to do by treating them? So the people got the Lyme Connecticut-type treatments at 10 days of tetracycline or 10 days of penicillin.

If you did the blood culture test for McDonald, afterwards, they were positive. So the treatment didn't work. So I said, all right, first thing is the treatment doesn't work.

And second thing is the post-Lyme syndrome is not post-Lyme. It still is Lyme. So that was the second thing. So then how do we treat this thing? So what McDonald did was he teamed up a local dermatologist, Dr.

Bernard Berger, and he took patients who had their Lyme rash, the erythema margarine's rash, and they biopsied the edge of it and cultured living spirochetes from it and then tested it against different antibiotics.

Pretty cool. They found that doxycycline is better than tetracycline and amoxicillin is better than penicillin. And so that's how that whole thing got started.

Then they found erythromycin worked in the test tube, but not in people. So that's the beginning of, you know, the subtleties of Lyme. What happens in paper doesn't always happen in the real world.

The way I saw it was switched from penicillin to amoxicillin. In the 14 days, nobody got better. So Dr. Berger, the dermatologist, said, you try a little bit longer.

So I did that. I treated for 14 days, no one got better. I treated them for one month and tabulated whether or not they get better. But with McDonald's culture, I was able to know whether they really were cured or not.

And because of that, or thanks to that, I was able to make my own definition of cure. My definition of cure was to get rid of all the symptoms, major and minor, back to the way you were before you got sick, and not relapse for three months.

So with the amount of definition of cure, not the major symptoms are away and too bad of what's left, I found that one month of amoxicillin and high dose, 3,000mg a day with prevencin, which is a booster, only 17% got well by that definition.

So 17.17. Wow. So, and there's the people who had the same age symptoms, they were sick for a while. So Dr. Burdrigan said, why don't you try longer? So I went from four weeks to six weeks, two months, three months, and more.

And I found that there's a plateau. About two thirds of people got well and stay well with longer treatment. Males was four months. Females was six months if they were hormonally active.

That was the first report of the difference between males and females, whichever we're males about today. So then I said, that's when IV rociferin was introduced and took the place of IV penicillin.

IV penicillin was used in syphilis. They tried it in Lyme, a lot of failures. When rociferin came out, ceftriaxone, that was found to at least the test tube to work and some early studies show it was great.

So I said, let's do that. So I took a group of patients, 26 patients who had a positive culture, put them on rosafen for two weeks. Some had two grams a day, which is standard dose.

Some had double dose, four grams a day. And at the end of the treatment, they all were culturally negative at the treatment end. But if you rated three weeks or more, they all had symptoms again, and they all were culturally positive.

So even a heavy duty IV drug, a double dose for two weeks didn't work. So then I discovered in the people with chronic Lyme that the symptoms seem to wax and wane every four weeks.

And that was kind of an interesting observation. I talked to Rie Bergdorf. He said, in our mouse studies, we find the same thing. If you analyze them, the sparkatemia increases and decreases in a four-week cycle.

That was very interesting to me. Later on, urine antigen studies found the same thing, waxing and waning of urine antigen spillage on a four-week cycle.

So I was using that to indicate active infection. If someone still had four-week cycles, they still were infected, because that wasn't normal. That's not nature.

That's infection. And from that is they have to determine how long people needed to be treated. So basically, you need to treat them until the four-week cycles stop.

Antibiotic Dosing, Blood Levels, and Treatment Cycles

Also, it means that the line germ grows and then goes dormant and then grows again, which McDonald also proved. I mean, he was the first to talk about dormancy and latency and biofilms and all that.

And this is, again, back in the 80s, a long time ago. If you didn't treat to bracket one whole generation cycle, you'd have a treatment failure. So three weeks of treatment really never really worked.

Maybe some few patients here know the early line, but it really never worked long term. And so my thinking was you had to treat at least four weeks and preferably six weeks.

their bracket hold generation cycle. Over the years, it evolved with myself and other clinicians that, you know, you will want to get someone to stop cycling and then to it for a few more months to really, really, really be sure.

And that's kind of how we define the end point because there is no test for cure. Right, and currently the ILOD's recommendations for an acute case is four to six sweeps of doxycycline, 200 milligrams twice a day.

Right. And then if it's chronic, there really is no time on its treating until symptoms have been resolved for at least two months so that you've gone through two of these potential growth cycles without seeing any improvement in symptoms, like with the patient getting any better, or with any sort of like perks thing.

So it's kind of like two months of they're pretty much back to normal and they plateau with their treatment. And it sounds like you figured this out a long time ago.

Oh, sure. Another thing you mentioned was for what I pick up on is the dosage. So already studies, as I mentioned, moxacillin was supposed to be 1,500 milligrams three times a day.

That never worked. So we had to go to 1,000 three times plus probenicid, which is a booster. And I found doxycycline even 300 milligrams a day never really worked.

went to higher doses. When I started treating more people, there were those who got these higher doses and did completely well and others who just did not, just didn't respond.

So I figured something's not right. So I did studies on the blood levels of the antibiotic. I said, maybe people are not observing it or they're eliminating it more quickly.

And sure enough, What I did was I took a blood test, put the person on the antibiotic, and took a blood level, measured the amount of antibiotic in the bloodstream just before a dose and then an hour or two later based on whatever drug I gave them to what was appropriate.

And I found the variability of highs and lows in amoxicillin was a 100-fold difference. Some people absorb amoxicillin completely well and had a blood level in the 20s.

Other had 0.1 milligrams per deciliter in the bloodstream. They just were not absorbing it. Same thing with doxycycline was a 10-fold variability. And also, the double more obvious is if you're looking from oncology textbooks back then, IV doxycycline is equivalent to oral because it's very well-absorbed.

However, I found a 10-fold variability there, too. So, idridoxy is far, far better than all doxycycline. So that's where the standard doses that I came up with, that's where it came from, objective measurements.

And clinically, I had a patient, for example, who was a regular patient, mine had known her and her family, and she came through with everything with migraines rare, she was just starting to get ill.

So I put her on the fully recommended dose of the medication, and weeks and weeks from buying, she was just not getting better. Through the blood levels, she wasn't absorbing.

That's what she had two different meds, blood levels fine, and she got over totally, and that was the end of it. So that's also why people are so variable.

You know, there's why Alad's very smartly doesn't say, this is when you stop, and it's a dogma. No, it's based on patient response. So when did you kind of discover, realize, however you want to put it, that, you know, Borrelia lives inside of the body in three different forms for just to make it easy for, you know, for people listening?

So we have like the cyst or the round body form, we have an intracellular form, and we have a modal form, right? And so you have to take various classes of antibiotics that cover each form that Borrelia might be living in, and you have to take them simultaneously, right, to be able to effectively treat it.

Otherwise, for example, if you just take doxycycline, then they might just turn into the sister round body form and stay dormant until you stop the doxycycline and then come back out.

So how and when did you put all of that together? Again, thanks to Dr. McDonald, he was, in the 80s, was the first to report that Borrelli make a biofilm.

He showed that in pictures, and I saw it myself in his microscope. He also showed that Borrelli can lose their cell wall and become a round body or an L-form.

He described and showed pictures of the cystic form of Lyme, and at the same time, he showed them living inside nerve cells, brain cells, skin cells, and so forth.

That was, again, one time ago, and we didn't really know what to do with this information. And you talk about dormancy and latency. We call that stationary phase now, persistors and all that.

So we didn't have knowledge of how to do this. We had amoxicillin and tetracycline, doxycycline, and erythromycin. We didn't even have biaxin, lisifrimax, nothing.

So we didn't really have many tools. We didn't know about flage or metronidazole working on a cystic form. That came many years later, thanks to Dr. Horowitz.

We didn't know about dormancy and latency and what the herbals we use nowadays and Depth Zone type drugs to break them up. So I figured, all right, if the spirochete goes dormant and you can't kill it, let's say you have a patient on treatment, they improve to at 60% or 80% and they stop improving, they're on a plateau.

Well, antibiotics kill germs during the growth phase and then they go dormant. If you have a dormant spirochete and it's not growing, the antibiotic can't kill it.

So I said, what if I were to stop treatment, let the spirochetes recover, and then treat them again? So that's beginning what I call cycle therapy, CYCLE, where you treat the person to a plateau.

It could be three, four, six months of treatment. If they're on the plateau and they're not getting better, tell me to stop everything. What happens is, for a few days, they actually start feeling better as the medicine leaves their system, and they're pretty good for a couple of weeks.

But with phlebitinic, you know, the old familiar symptoms are coming back. By the fourth week, they're ill again. Well, that means the spirochetes have woken up.

They've reverted out of the cyst to the spiral form. They've gotten out of the stationary phase. They maybe shed some diaphragms and start to grow. So what you do is you go back on treatment, full dose, induce a herxamic cuff or another layer, wait till I hit a plateau again and stop.

And you keep doing it in cycles. And it's based on symptoms, not the calendar. And basically it was, you know, a break of three to four weeks and put them back on for six or more.

So even back then, we didn't have the tools we have now, but we still are able to figure out a way to get around it. And it worked, I would say, at least two thirds, three quarters of the time in the chronic Lyme patients.

And now, But the work on persisters, they did actually publish studies on this and they found the same exact thing how many years, 40 years later. So when did you put together the first draft, the first treatment guidelines that ILAD still refers to?

Oh, that was in the mid to late 1980s. You know, I was in my office. I was really busy. I didn't have time for lunch breaks or even bathroom breaks sometimes.

And if I would ring, doctor says, you know, I have this new thing called Lyme disease. Tell me how to diagnose and treat it. I'm on the phone. I don't have time.

And yeah, I try to do my best, but I was sometimes getting several calls a day. So I say, you know what? I'm going to write all this down. So if they call, we had no internet then.

So if they called, I'll say, you know what? I'm going to mail something to you and you can read it. And that's how I started doing it. And that was…

I don't know, probably 1988, 1989, I suppose.

Biofilms, Persisters, and Combination Therapy

And then when was ilides form? 1991, I believe. So this is something, you already had these guidelines all put together to do ilides forming to have the treatment guideline.

Okay. So what else can you tell us that you think is pertinent to what's going on now with Lime from its history? What can we learn from its history? What can we learn?

Well, it depends on how far back you want to go. We can learn that in the 1970s, the researchers obviously weren't aware of the literature on Lyme disease that went back to the late 1800s and continued through the 1930s about connecting the tick and the rash and the bite and arthritis and the neurologic and all those things that we now talk about like it's new.

So those researchers should have known more. The first case of erythema cronicum migraines, used to call it cronicum, because that was named by Avzalius back in, I think, in the late 1800s.

ECM, they used to call it. It was reported by Dr. Scramenti in the Upper Midwest. He's a dermatologist. That was in 1970. Before that was five years before Lyme, Connecticut hit the map.

And he found these rashes did better if patients were given penicillin. In my own hometown of Montauk Point, Long Island, there's a retired, semi-retired internist who would see these strange bullseye rashes and would give people penicillin and they would resolve better than if you didn't.

He also described a monoarthritis, he called it Montauk knee, which of course was Lyme arthritis at the time. So all those things were out there. And Scrimenti, from the dermatologist, he published this.

Again, the people in Connecticut never looked into it. They weren't aware of it. Again, they were not infectious disease doctors. They were the wrong doctor at the wrong time.

So what you learn is that, number one, they didn't go back and learn their history of medicine well enough. Then we learned that they sent the wrong kind of doctors.

It should be infectious disease, not rheumatology or immunology, because that started the controversy. Then when it was found to be infectious, they should have worked on infectious treatments.

They should have had long-term follow-up with the patients. I'll give you another example. There was a dogma back then that everyone's Lyme had a rash, the Lyme rash.

Now we know that's probably 50% of all this. Why do they say that? Because they had a Lyme clinic, and you're going to love this, that a Lyme clinic, and to be admitted to the clinic, you had to have a Lyme rash.

They'll let concluded, wow, everyone has a lawnmower. No, those be your entry criteria. But this had been published, and this was adorned at the time.

Now was it? I hate to use the word stupidity, or maybe was it a cover-up? I don't know. So, I mean, following that line of thinking, like, I always go back to why is it that infectious disease wants to say that everything beyond treatment, and a lot of times it's not adequate treatment, is, you know, post-treatment limesty.

Like, why are they so unwilling to even entertain the thought that there is still an infectious organism causing all of those symptoms? Tell you about a few things.

One of the most vocal critics, I won't mention names, university-based vocal critics who really went after all the Lyme doctors who were eyelids leaning and so forth, followed my guidelines, he himself got Lyme disease.

And he was the one who said he never saw Lyme after three weeks of treatment and all that. He ended up getting 11 weeks of IV rosephin. And I know this because I know the IV home nurse who administered it to him.

And she said, I will risk my reputation and license and tell this publicly. I never gave out her name nor his cause I don't think that's appropriate. So that person totally knew it.

That person came to my local hospital and he said he. How do you put it? He never saw a case of Lyme that had a negative blood test. From three weeks later, published in a major medical journal, was a report from him that all these people had a negative blood test and you did these other things and proved the headline by some other means.

So he totally lied and again and again and again. So there's definitely something there. Was it he's trying to preserve from the usual interests of himself and universities and everyone else?

Or was there something else behind it? You know, Chris Newby wrote a book and has done a lot of work talking about how William Bergdorfer was actually a biowarfare expert.

And he had apparently done work on trying to utilize Borrelia and ticks and other tick-borne pathogens as a biowarfare agent. I don't know that much about it, other than what I've read from her work, and she'd be a great guest for you to have, I'm sure.

Could that be that they tried to minimize it because they thought that people would be upset if it came out? I don't really know. I don't really know.

And are you referring to basically, like, the lab that was on Plum Island?

Writing the ILADS Guidelines

The work that Chris Newby did showed work that was done actually at the Rocky Mountain Lab in Montana and at Fort Detrick in Maryland. She didn't mention much about Plum Island, although I'm sure that's possible.

Plum Island is in Millalime, Connecticut, off the coast of Connecticut, and it was a government-run animal infectious experimental station. Very heavily guarded, by the way.

You can't even go near the island if you're on a boat. They chase you away. I just say it's because, you know, they don't want people to get open mouth diseases, which they're studying.

I don't know. I don't want to get into that in detail because I'm not an expert on that. It's just from what I've read. But it makes sense that they tried to minimize what they were doing if they worried that somehow it was a lab leak or whatever.

I don't know. So as far as all of that goes, what do you feel comfortable saying? Well, I feel comfortable saying that I believe it. I don't feel comfortable giving the details because other than what Chris Newby has written about, I don't really know.

But I will say that when Wuybergdorf would give lectures, this always bothered me and I'm so sorry I didn't go and confront him with this. We'd have our Lyme conferences.

He would come to Lyme Disease Foundation, Karen Frosch's great organization, and he would give lectures. And he would not be understandable. He would sort of ramble on about African Borrelia and other things and never give any information that was useful to researchers or clinicians or anyone in the audience.

And he would, you know, again and again, you'd hear his lectures and they were like nothing. It's like in retrospect, was he trying to just minimize his role?

I don't know. And he has since passed away. Right. What happened was he allowed Chris Newby to see his private papers, some of which he kept probably not legally from his work in the lab.

And she got to see actual photographs of him injecting ticks with different pathogens and the research letters and so forth. It's really a remarkable story.

You have to read the book if you can have her on the show. Yeah, I would love to have her on. I bred the buff. And also, she talks a lot about how also with Brachycea, right, like it wasn't just Borrelia, there was actually a lot of research done with Brachycea, which is, for the listeners, one of the organisms that causes Rocky Mountain spotted beaver.

Well, you know, before they discovered the lime spark eat, they knew that rickettsia were in ticks. So they thought, well, if it's not a virus or an autoimmune disease, maybe it's a rickettsial disease.

But when Borrelia were found in the ticks that Willie collected, then they changed their thinking that it was a spark eat and not a rickettsia. Why they said that I'm not sure, except that I know from Chris Newby's work that they had blood tests that showed reactivity to rickettsia and probably to Borrelia as well.

And somehow they decided clinically that it wasn't the rickettsia, it was the Borrelia after all.

Why Lyme Was Misunderstood

But it was likely to be both. Well, in retrospect, I'm sure. Yeah. All right. Well, thank you for sharing with that, even though I know it's not, you know, your firsthand knowledge, but yeah, she would be a great guck.

So if you had any sort of hurting words of advice to give to our listeners, if they are someone who had been struggling with Lyme or another vector-borne disease or has a loved one who has, what would you tell them?

Well, I tell them to do their research. And be careful who you listen to. I mean, IRADS is the source. These are Lyme-related physicians who have been trained, who have seen hundreds, thousands, tens of thousands of Lyme patients.

They know what they're doing. That's what you listen to. Just today, I have to say, just today, I got an email alert from New York State Department of Health that if you get a tick bite, you can give a single dose of doxycycline and it will take care of you.

That is the biggest fallacy in the world. It's almost malpractice, in my opinion, because there's no scientific basis for that whatsoever. And you can read articles by Elizabeth Maloney, Betty Maloney that totally debunks this.

So, correct me if I'm wrong, but this was based off of one study that had somewhere around 10 participants, and they judged whether or not in the end the patient developed Lyme or did not develop Lyme.

by the presence of an EM rash, and it was out like day 30. So they didn't follow anyone beyond 30 days. The diagnostic criteria was the EM rash, which we know is present less than 40% of the time.

Didn't look for co-infections or anything else. And again, the participant size was so, so small. that it doesn't even really have a significance and the study was never repeated.

And yet, you know, here I am in Connecticut, 30 minutes from Lyon, Connecticut, and I can't tell you we get call after call after call, patient after patient after patient whose doctor right here in Connecticut has given them one dose of doxycycline to treat their tick fight.

Well, that's so long for so many reasons, even an animal side with mice and found a single dose dinner white had to give long acting formulations for it to do anything.

So that's just so wrong. It's just, it's maddening to me because it's like, you know, if you catch this and you get the appropriate treatment. So if you get the appropriate antibiotic at the appropriate dose, at the, for the appropriate amount of time, we can prevent so much needless suffering.

That's right. I can tell you another experience of mine. You know, I saw patients from all around the world, literally all across this country and others, who were very sick with Lyme, chronic Lyme.

They weren't getting better. And the least majority of them were undertreated in the beginning. They got a few days of tetracycline or something. And what happens is you kill the rica germs, the strong one behind, and you also kill the more superficial ones that leave the deep ones really deep if you undertreat this thing.

So that's one big part of what I'm seeing with this one dose doxycycline thing. It doesn't make any sense at all. You know, to take that a step further too, you know how I love to go on and on and on about the immune system and the microbiome.

You think about it, it's like, okay, so let's say they get put on the 10 days of doxy, right? Or even the 14 days, right? Which to me, and I know you agree, is under treated.

It's not adequate treatment. So what happens, we go in and we kill off the good, healthy flora of the gut. which is necessary to modulate inflammation and is necessary to have an appropriate immune response.

So basically, and we've not treated this infection through a full life cycle. So we've done exactly what you've said. We've picked off the weak, left the strong, We've now damaged the microbiome.

We've helped this organism by causing inflammation and weakening the immune systems.

Advice for Patients and Finding Lyme-Literate Care

It's like the perfect storm of altering the terrain of the body, the immune system, and inflammation to actually allow this infection to become chronic.

It's so ironic. I've never thought about it that way before. Well, you know, there's another aspect to it also. Published studies have shown that if you have a case of red lime, you undertreat it, and the lime is still there, proven by cultures, whatever, afterwards, that early treatment can prevent the blood test from ever showing.

So somehow it stops the immune system either because it damages the microbiome or because it stops the germ before the immune system got to wake up. So under treating not only makes the infection worse, not only can harm the host, it also makes the patient harder to diagnose because the standard testing will not show it now.

So somehow it affects the body's ability to produce the antibody. Huh. It's so convoluted, and it's such a perfect storm that in a way, and I've become, I try to be an optimist, but I'm cynical about some things in our healthcare system.

I mean, it almost seems like it's literally setting the stage for this chronicity to develop. Yeah. Well, again, if you go to a Lyme-rooted practitioner, doesn't have to be an MD, just a Lyme-rooted practitioner, They know this.

They will work with you. And if they don't know it, they'll find someone else who does will help you. And that's the thing. Be very careful for whom you speak with.

And that's a good point too. So you can go to ILADS, I-L-A-D-O-R-G, which is the International Lyme and Associated Disease Society. And you can put in, I believe, I haven't done it in a very long time, but I believe you can put in your zip code or your town and you can try to find a Lyme literate practitioner in your area.

Or you might have to actually message them and then they'll give you the list. I know that they like to protect, you know, a lot of the doctor's privacy because, you know, frankly, in some states, these Lyme literate medical practitioners are putting their license on the line by treating outside of whatever their state's current medical guidelines and standard of care is.

Another good resource are the patient support groups, which are all across the country. Now, if this was such a simple, easy diagnosis, easy cure to illness, why would there be support groups all around the country?

But anyway, recent people have been through it, and they will give you good advice as well. Yeah. And so I think

you can go to LymeDisease.org. Project Lyme is a good one.

There's the GLA. Do you know of any other good ones? So the ones to start with, because they are all interlinked. All right, well, thank you so much for being here.

It's always a pleasure to talk to you on anything else that you'd like to say before we end for today. What you've said, I don't agree with your being pessimistic at times.

I think that so much is being done. More and more doctors being educated. We're finding more and more pathogens, better treatments for them all. And you know, if I knew now, if I knew back then, it would be even better still.

But no, the future is rosy and people are sick for a reason and we can figure it out and we can get most of them better one way or another. That is true.

And people should definitely not lose hope. There's something out there and so much research being done literally on a daily basis. So thanks to all of you at home for listening.

And if you want to hear more about the history of Lyme disease, You can tune into our Lime Bites Symposium November 14th and 15th at the Pompano Beach Marriott in Fort Lauderdale, Florida.

So thanks again for listening to Lime Bites. We hope this brought you one step closer to true healing. Thank you for tuning into Dr. Talks. We hope today's episode has enlightened and inspired you on your path to optimal health.

Each day is a new opportunity to make choices that empower your well-being. For more insights and strategies, subscribe to our podcast and visit our website, www.doctortalks.com.

Stay connected, stay healthy, and join us next time on Doctor Talks. Real talks from real doctors on the issues that matter to you most.