

# Bartonella: A Prime Driver of Persistent Chronic Illness

Dr.Robby Besner PSc.D. interviewing **Brian Plante, N.D.** 



### Robby Besner PSc.D.

Alright, welcome back everyone to the Healing from Lyme Disease and Chronic Ailments Naturally Summit. And today we have an exciting guest, he's got actually a perspective that I love to bring out because he just doesn't focus on Lyme from the big picture, but he actually kind of dives deeper as to the relationship of Lyme, mold, other microorganisms, and certainly the co-infections like Babesia and Bartonella, and I think that that's important to know because oftentimes that's misunderstood and there people are reacting to the Lyme side, when there's symptoms and maybe the real culprit is Bartonella. So I kind of like the idea that he kind of pulled that part apart, and he's willing to talk about kind of the things that he does that brings some great successes in clinic. So with that, I wanna bring to the interview Dr. Brian Plante, how are you today?

### Brian Plante, N.D.

I'm great, thanks so much for having me around here, I'm excited to talk with our audience today about Bartonella.

#### Robby Besner PSc.D.

Well, I kind of looked over your background and it's pretty diverse, and you've been at this for quite a long time for a young man. So could you just, for people that are just tuning in, could you give us a little, like a walk through memory lane, a touchback, give us, go back, give us a backdrop, a little bit of how you're a naturopath, how you got interested in this infectious disease, particularly homing in on microorganisms of Lyme disease, the co-infections and all that. And then bring us a little bit, walk us toward to the kinds of things you're doing today that interest you.



Yeah, absolutely. So I became interested in naturopathic medicine because I knew that our healthcare system was in needing support around chronic disease and treating the whole person, body, mind, spirit environment, and how, a lot of what we work with, we need support on all those different planes. The way that I got into Lyme and complex chronic illness was interesting 'cause a lot of folks say, oh, do you have Lyme? Or, I got into treating Lyme because I had Lyme myself. To my knowledge I don't have Lyme, but what became very interesting to me was solving complex puzzles. I've always kind of had a brain that has a tendency to identify and see patterns where others maybe don't. And I saw that with Lyme and co-infections and other complex illnesses, there were all these layers and nuances. An approach to one patient might be extraordinarily different than approach to another patient with the same infections, based on age and all these other factors, so I became really fascinated by that, I also tend to get bored easily, so I wanted something that was gonna keep me interested. And so I love the intellectual challenge of treating these conditions, and I also see folks needing a lot of compassion, empathy, and support, because a lot of folks who are struggling with these conditions have been misunderstood and underserved by mainstream medicine, and including sometimes by other natural health providers who had a little less experience treating these infections. So, I love the capacity, the opportunity to be able to connect with folks on this and to be able to solve, or at least collaboratively engage with these complex problems.

### Robby Besner PSc.D.

Brian I think that you're really original. Imagine a practitioner that actually asks questions and sits and listens to the answer. Wow, it's kind of cool. They say, or I've read that Hippocrates said that if you listen to, you ask the question of the patient, like how you're feeling, and you listen to them intently, they'll actually give you the diagnosis. And then if you go deeper and actually listen a little longer, they'll tell you how to fix them. And where have we missed it? In mainstream medicine like we talk about, of course, you're referencing the allopathic Western approach, and certainly that has worked for many years, but I think what we're discovering now maybe is a part of the whole COVID pandemic challenge globally, is that there are other approaches to fixing the problems out there. And I love that you've taken kind of that integrated functional approach where you've got a discipline, but you're open to look at multi-disciplines approaches to solving the problems, the healthcare challenges. And I think that that's super important, particularly in today's day because we are complex, something like Lyme disease and the relationship between



all the other microorganisms and bacteria is complex, and everybody's body kind of responds to that a little bit differently, and I think that's why Lyme has been so misunderstood and so misdiagnosed over the years. So with that, let's home in a little bit on what you focus on. You're an integrated functional guy. You've actually had a lot of exposure with autoimmune diseases, and one thing that's really interesting to me is the mast cell activation syndrome. And we'll kind of talk about that later on in the interview, because I think that's another topic that is a player at the table, that people need to know a little bit more about, but let's just focus on some of the things that you're interested in.

### Brian Plante, N.D.

Yeah, absolutely, so a lot of it came through exposure. So I was very fortunate in my residency to work with a Lyme doc, and see a lot of this stuff firsthand before I even knew anything about it. Unfortunately, even sometimes in the natural world, there isn't adequate training in these complex more emerging diseases, and so my first encounters with residents who were like, oh, that's interesting, I hadn't seen that before, I saw a lot more Bartonella than I expected to see. I started to develop a pretty keen ability to see the pattern of it and how, oh, nobody's talked to you about Bartonella, oh, okay, well let's test and then we find it, and then there's a response to treatment and all that. We also saw a lot of mast cell activation syndrome, a lot of mold, a lot of hypermobility syndromes. And so it was very interesting for us as naturopathic, we were at, it was an all naturopath practice to be able to think about all the stuff we normally think about as naturopathic doctors, adrenal health, thyroid health, gut, microbiome health, and mucosal health. And we started to see all these patterns associated with Lyme and co-infections to where, if we treated those foundations like any naturopath would, they were doing a lot better. But then there was also this dialing in and saying, okay, well, you need a little bit more mast cell support in order to tolerate this treatment. Or we need to hit the pause button on antimicrobials and really zoom in on detox for the next few months. And so the capacity to be able to dial in to each individual while still seeing these basic principles that repeat and patterns that repeated themselves, got me really excited about it. And so, we could get into a conversation around certain therapies that we would use, but I think just having that integrative naturopathic frame, where education became very important, treating the whole person became important, doing that collaborative detective work to identify the underlying causes became very important. And so I just see the interrelationship between integrative and natural medicine, and Lyme and



complex illnesses as going so hand-in-hand. So we feel very excited and very grateful for the tools in our toolkit to be able to kind of bring those two together.

### Robby Besner PSc.D.

Nice, for those of you just tuning in here is a doctor, a naturopathic doctor that actually asks questions and listens to the answers. And you know what else I thought was really very important for people to understand is that the, besides making the diagnosis, it's a puzzle, right? And the way that you fit the pieces of the puzzle, meaning the order that you do things in, and the way that you dose what you do can make all the difference between a moderate result, no result, or a magnificent result. And of course, that shifts from person to person because Lyme is a really personal experience. Everybody's body manages it differently and in different phases. And that's really what kind of got me super excited about talking with you today because you look at Lyme first off, you're part of ILADS you joined ILADS not too long ago and for people that don't know what that is, it's like the mother ship agency independent of the government per se, that is managed by Lyme experts. Actually my daughter who contracted Lyme when she was 15, she was treated by Dr. Joe Burrascano, who was like the kingpin, right? And also by Dr. Steve Bock who's now the president of ILADS. So it's kind of exciting to me and people should know, it's not like you just, Lyme is just one of the things that you treat, it's like you've dedicated a fair amount of your interest, your research, and your protocols around Lyme and the co-infections. So, if Lyme is the sort of the broad brush stroke, I want you dive deeper and you make this big distinction that even though it might be Lyme, what really might be the culprit, like we said earlier is Bartonella, so how did you get on that path and how do you distinguish the Bartonella besides what you can get in a blood test, of course? The symptoms and how do you really see that clinically and then create some kind of a treatment plan around that?

### Brian Plante, N.D.

Yeah, great question. So, kind of the way that I break this down is, we know that patients who have Lyme alone versus patients who have Lyme plus co-infections, seem to respond better to treatment. So people who have co-infections, and it doesn't seem to just be an additive effect. There does seem to be a synergistic obstacle to full recovery because of the different ways in which these organisms dysregulate the immune system. So you have dysregulation from Borrelia aka Lyme, dysregulation from Bartonella, potentially other co-infections, opportunistic viral infections, and fungal infections. So I really like Richard Horowitz's model of multiple



systemic infectious disease syndrome, because we really are looking at a pattern. That being said, the individual organisms that make up that ecology matter, and there seem to be certain patterns or trends that might point us toward one organism over the other as being kind of a primary driver or primary obstacle to recovery, especially if somebody's been treated for one of the vector-borne infections for quite some time, and they're not quite getting to where they wanna go. And so with Bartonella I tend to see, we can see a lot of the same symptoms that you see with Lyme. I also always like to preface it with these symptoms are not always exclusive to an infection. Sometimes it's like, oh, we think about Babesia having night sweats and shortness of breath, and air hunger and headaches and things like that. We can also see those symptoms in Bartonella and vice versa. And so, what I wanna do is talk about some distinguishing factors that might make us think about Bartonella, without us thinking, okay, if I see those symptoms, it must mean Bartonella as opposed to something else. So it's very important to find, to work with a provider or to do extensive kind of study on your own, if that's the route you choose to take, that looks at evaluating broadly for these infections, so that we're not missing one, because that's what's really important, especially because of that synergistic effect that they have on, not getting to where you wanna go health-wise.

So, Bartonella, what really stands out about Bartonella? They're almost always as a neurocognitive or neuropsychiatric symptom that I see in my clinical practice. Whether that's anxiety that doesn't have a clear explanation, irritability and rage are very common, especially when we start to talk about what does a Bartonella die-off or Bartonella herbs look like. We tend to see that their associated conditions might be pots or dysautonomia. There tends to be Bartonella in those cases because Bartonella affects connective tissue and how our collagen aligns. So anywhere in the body where the connective tissue could affect certain symptoms in terms of muscles, joints, tendons, poly tendinopathies, tended to be present in Bartonella and hypermobility syndromes. Those are all kind of pointing me in those directions. Of course, the classic headaches, joint pain, muscle pain, nerve pain, like I said, a lot of neuro or neuropsychiatric components, foot pain, I've seen a lot, and then the numbness and tingling. There is some skin manifestations, especially there can be what we call striae distensae which are stretch marks, but they have a bit more of a radish appearance. And sometimes those will actually go away with treatment. And there's a few others as well, mast cell activation, I very commonly see in Bartonella. I have seen it a few times when Lyme is the only player, but almost always it's either Lyme plus mold, Bartonella plus mold, Lyme plus Bartonella, or I have seen few



instances of Bartonella by itself. So, that's kind of a broad overview of what I might see or what may point me in the direction that, hey, we really should do some followup testing or some empiric therapy that incorporates coverage for Bartonella, because it may be a contributor here.

#### Robby Besner PSc.D.

I love how you talk about the primary player, the primary driver, because there are some people driving the bus and then some people are, some organisms are sitting in the cockpit, and they play back and forth. And so it is interesting that you make that distinction. And how about brain fog? Is that another one that would fall into it?

#### Brian Plante, N.D.

Very often, yeah, brain fog, pain, fatigue, chronic fatigue with neurocognitive components is very common as well. And we'll see that improve with treatment. Brain fog is one of those classic kind of, you see it in almost every infection, chronic infection that we see anyway and mold toxicity. So it can be difficult to use that alone, but we see it, yeah.

### Robby Besner PSc.D.

Well, there's a strong school of thought and in our body of work, we make infrared saunas and infrared devices and so forth, and so we like to treat, when we're working with Lyme patients and families, we like to kind of lower their toxic burden on their bodies first, before we actually start a protocol that might create another toxic event. If they're already symptomatic, then they're toxic and they're inflamed. So to us, inflammation and toxicity kind of run on the same highway together. And so if we can lower toxic burden, then we lower inflammation, and now we give the practitioner a little bit more time to investigate root cause, see who the player's in the driver's seat at that moment. But meanwhile, the patient is feeling better already, you're getting more of their all life back. The shadow of what they used to be is oftentimes emotionally involved in many of the discussions we have with our Lyme patients. Do you see the same thing that lowering toxicity, you think toxicity is a big part of this?

#### Brian Plante, N.D.

Absolutely, so in almost all cases, there's some degree of toxicity, whether that's environmental toxins from mold, chemical toxins or heavy metals, or just the internal environment of a waste-producing microorganisms. There's often a genetic component to not being adequate



detox and not having adequate detoxification pathways. And so we often need to support those. In most of my chronic infection patients, I'll do what's called, what we call anti-inflammatory buffering for several weeks, depending on how much the patient needs, where we're pre-loading folks with fish oil, vitamin D and K, we'll often check their levels of vitamin D, especially make sure they're making active vitamin D appropriately, but not too much curcumin, all that stuff, and then based on their history, they may know if they've been doing treatment for a while, or if they got sick when they lived in a moldy apartment, they may know their environmental soldiers but if not, we may do some testing there, we may just kind of empirically treat broadly depending on what someone's costs, allowance is around testing, and sweating is huge, we love sauna and BioReset and binders. So absolutely when you're reducing, and naturopaths love the analogy of the bucket, the toxic and inflammatory bucket, where, okay, we all have a bucket, they're all maybe different sizes, and they're all filled to different degrees of, with inflammatory or toxic stressors, and for one person whose bucket is this close to being overflowed, you add a couple more drops to that, which might be bacterial die-off, and the bucket overflows in there, they're not doing so hot. And it may actually set you back weeks to months, and sometimes even longer in terms of treatment, if you go too fast. So, the only time I hit it with everything all at once is when it's an acute infection, and someone has a pretty vital constitution. Otherwise super important to kind of keep our minds attuned to those toxic and inflammatory contributors. So we can kind of structure our treatment and dial things appropriately for what that person's gonna be able to tolerate.

### Robby Besner PSc.D.

Well, some people know what the acute phase is and some people don't. So generally it's that 30 to 45 days, maybe even 60 days initially, while the bacterias and parasites are in the serum, they haven't actually gotten into the cell. That's the distinction between, and it varies from person to person, because we've seen patients that if they've gone from acute to chronic in two or three weeks, like that's just how their body accepted it, maybe because they had other either imbalances or friendly bacteria or microorganisms that just welcomed them into their home, so to speak your home, your house. I find it fascinating that you've actually determined or separated it out like that. And what I like mostly about the detox component is, there's more toxic, we're living in a toxic world now. So we've got chemtrails, we have GMOs, we have glyphosate, we have all these household chemicals, everything you see on TV. We had the opportunity to talk to a guy who has the answers that are solutions to replace the chemicals that you have in your home.



And often he says, the number one culprit is your laundry detergent, 'cause they're putting all kinds of dyes and perfumes and things in that, that stay on your clothes, now for a normal healthy person, it may not matter at all, but we're talking about this world of Lyme disease, chronic people have chronic challenges and they become hyper sensitive to foods and chemicals, stuff that touch their skin and things that they breathe, and/or other joining microorganisms-like used to get a Lyme patient that is functioning, and then they get in touch with mold, and all of a sudden they go from functioning to bedridden almost overnight. But I've never seen a more antagonistic in terms of the body combination than that, and many people tuning in, I'm sure I can appreciate that as well. So, let's talk a little bit about the other kinds of things that you see in your practice, and what's interesting to me, well, let me ask you, if it's Lyme and they've been tested and you see that, in order for you to determine who the culprit is, are you just looking at blood testing and clinical symptoms as they express themselves, or is there more to your magic in the way that you determine what approach you're gonna take to try to help the patient out?

### Brian Plante, N.D.

Yeah, that's a great question. So I always like to be transparent with other providers and with patients that we are far from being in a perfect place when it comes to diagnostic testing. There's a variety of reasons for that. These organisms are incredibly adaptive and intelligent, in their way of actively manipulating the immune response, and avoiding the immune system by hiding out in harder to reach places. And so antibody testing isn't always reliable. And so T-cell testing is another method that we could look at, there's PCR but there's limitations there too, that's a way of detecting DNA of some of these microbes. We could probably do a whole talk on just testing when it comes to complex chronic illness and polymicrobial infections. The important thing to remember is that these tests can be guides, but they're not the absolute authority on what we're seeing clinically, which is why it's super important at least from my perspective, to have a trusting therapeutic partnership with a knowledgeable provider, who can help you put together the pieces of your history and your symptoms, with the pieces that we gleaned from specialty diagnostic testing, as well as more reference labs like quest or labcorp labs. I look at the whole pattern and say, okay, your Horowitz MSIDS Questionnaire, which is a 3D screening tool, suggest high likelihood of tick-borne infections. Your history tells me you've had cats, dogs, you've been bit by fleas and ticks. We will talk about that in a little bit, potentially around other vectors, particularly for Bartonella. Your symptoms are consistent with Lyme and



co-infections and your reference labs show low vitamin D, high inflammatory markers, low cortisol, and a lot of opportunistic elevations and viral and fungal antibodies. This is all pointing me in the direction before we're even seeing what your tick worm testing might show, that the likelihood of having multiple systemic infectious disease syndrome, aka Lyme and co-infections is quite high. So I always tell folks, we're constructing the puzzle of your health. So if I'm working with John, John's puzzle is gonna look really different than Sally's puzzle. And our job together is to make sense of that, and response to treatment is also part of that. So we use testing, we value testing, it's not useful as an isolated variable, in my opinion, until we get to a point where sensitivity and specificity is as close to 100% as possible.

### Robby Besner PSc.D.

I don't know if you agree with this or not, but some of the guys that we've been tracking that are really successful at helping people along, they analyze like you've just described, and then they put together a protocol, and then they get the patient on the protocol, and then they become really, really active listeners. So, what I mean by that, it isn't just hearing them, it's watching them and seeing how the patient and their bodies respond. And oftentimes, and there's one guy I love in particular, Dr. Steven Hines he's in somewhere in Texas, Southern Texas. And he feels, well, certainly, many of the testing, the Western blot testings, the IGeneX and some of the newer ones that are just really mind-boggling, the testing stuff that's coming out now that's amazing, because of the state of whether it's in serum or in cell, and that could be in transition part, the babies have migrated to cell but the parents or the grandparents are still in serum, so you're getting some results but not understanding the full amount of, or extent of the proliferation or of the population. They actually start on a protocol and one could be a homeopathic like cat's claw, right? And they offer the simple homeopathic and they start dosing it up like two tabs, four tabs, six tabs. And they wait to see how the body responds to it. And if they respond with a die-off, a gentle die-off, then it's very self-evident that there's some underlying challenge there. And that to me, it seems to be more of interesting, more natural approach to the equation, because again, the complexities of the parent who's taking lead, how the body's interpreting it, but certainly there's another form of information when you get on the protocol and you are an active listener and you see how the body is, the person's responding, and then you can fine tune the protocol based on that. So I think that that's an amazing approach. So by the way, I just need to drift back to the concepts of detoxing and the Herxheimer reaction, because we make infrared saunas and we do a lot coaching with Lyme patients, I spend a lot of time telling them to slow down. And I



think that's because particularly if you're chronic, and you've had it for years, whether you've been diagnosed or not, you start to, the patient starts to go, wow, I could, I stopped feeling myself 10 years ago maybe, but it didn't really wear its ugly head for lack of any words, other words, until for eight years or 10 years, and then I became super symptomatic for whatever reason, right? So, I've always felt that going low and slow on my approach to our sauna protocols was important, because if we throw them into the deep end of the pool, we could trigger one of those detox responses like you're talking about a Herx reaction. And same thing for an intervention of sort, whatever your game plan would be for me if I were your patient, taking that conservative low and slow approach, and then have an active dialogue with patient doctor so that you're informed and then you can fine tune, I think is super important and avoid a Herx reaction, just simply by seeing how their bodies are responding. I have to say this because oftentimes I'm frustrated when I talk to Lyme patients and they tell me their histories, as I'm sure you've heard thousands of them, and they say, well, my doctor had me do this and I did the protocol and I was in bed for two weeks. But I feel that if you lower the toxic burden and lower some of the symptoms, and then you do your active, go after the underlying source or the cause, that might be a little bit longer, but in fact it might be a little bit safer and an easier ride for the patient that's already had a rough ride. Do you kind of see that or take that approach.

#### Brian Plante, N.D.

100%, absolutely, so and that's why I love, not that this is exclusive to naturopathic medicine but I love that element of the naturopathic philosophy of, above all do no harm. Finding that sustainable pace is super key, and having that conversation with patients, especially if they've maybe worked with providers who use a little bit of heavier therapeutics, that mild to moderate Herxing we might expect, and to what degree is that classified is fairly subjective to the patient. But we wanna avoid at all costs severe Herxing, with the exception that I mentioned of an acute infection, which might be, we wanna really prevent, and this gets complicated if we're talking about somebody who has Lyme and then gets bit by a tick and gets exposed again, but that's kind of its own rabbit hole, but in most cases, it's absolutely what you just said, it's how do we find that sustainable pace where we're making progress, without taking three steps forward and then five steps back? And this becomes particularly important for very sensitive patients, people who have been sick for a really long time, folks with mast cell activation syndrome, or even folks with a more hyperactive, what we would call the cell danger response, where there's kind of a preemptive sensitivity if certain things, maybe if they don't have obvious histamine symptoms,



but they're still having that. So, we had to take that into account with everybody and really try to dial, so that we don't flare anybody unnecessarily.

### Robby Besner PSc.D.

So, while we're on the topic of detox before we go, let's talk a little bit about if you've been astute enough, to be able to identify that it is Bartonella as opposed to Lyme or Vizio or other of the co-infections, how do you minimize the symptoms? What kind of the detox symptoms, the die-off, how do you, what approach do you take that could avoid Herx in general? I'm curious about that and I think most people out there, again, back to the smooth ride, we all have the same goal in mind, let's do a sustainable program where we're not just putting a bandaid on the challenge we have today, but that we're actually creating that primal healing platform, so when you come out the other end of the tunnel as the patient, that you may have an episode here and there, but you have more good days than bad, and I think that is more expressive of the way that normal health is these days. So, what kinds of ways that you could have come up with that you feel that you can share with us about how to treat the Bartonella and minimize the effects of the die-off at the same time?

#### Brian Plante, N.D.

Yeah, so that's where supporting the body as a whole, the ecosystem of the body and supporting a weakened and damaged organ systems becomes pretty key. So just kind of going down the list, reducing the dose of antimicrobials and escalating appropriately for that person in their tolerance, that's piece number one. Piece number two is adequate anti-inflammatory support, before you even start doing that. So I mentioned fish oil and vitamin D and a few other things. There's a lot of tools in our toolkit, that we could use naturally and even somewhat on the pharmacologic side, but using it as a part of a more whole person individualized plan, so anti-inflammatory support, the detox support can be preemptive, there can be additional detox support that can be used, so when you're killing microbes especially Bartonella, whether or not you're even disrupting biofilm, there is a lot of ways that these microbes will release when you kill them. There's also an inflammatory component because the segments of their cell membrane and their certain proteins can trigger an immune response. And so if you've given adequate anti-inflammatory support, that can be helpful, but also sometimes we really need to help accelerate the way that the body gets rid of that waste. So I see binders being key there, that could be things like charcoal and clays, and I like some of the broad spectrum binders, that have



a little bit of everything. Those tend to be better tolerated, particularly by my neurosensitive patients. Adequate hydration, especially with electrolytes and some of the alkalinizing salts, folks talk a lot about Alka-Seltzer Gold, there are some variations of that on the market. We use a lot of IV therapy, and so you can hydrate with IV therapy with saline and even some gentle supportive nutrients. So my neurosensitive patients don't do amazing with a lot of B vitamins. So we focus on more supportive things that are gonna help flush stuff out, but also help the liver and kidneys and everything on a basic cellular level, be able to tolerate and work with that. We do a lot of ozone therapy in our office, IV isn't there, there's a lot of different ways to do ozone, but we do have this therapy called ozone plasmapheresis, where we actually filter off about 20 to 30% of a patient's plasma, which is the liquid portion of the blood. We have two IVs, one in one arm, one in the other, it'll pull blood out of one arm, run it through elaborate filter while it's ozonating it, usually a low potency ozone, and then return it to the other arm. Another name if you've heard of this type of therapy for is extracorporeal blood oxygenation and ozonation or EBOO. We do a few variations of that, I won't spend too much time on it, but essentially one method of detox, if we're doing those other things I mentioned, it's actually siphon the toxins straight out from the plasma. And that can make a significant difference especially if there's mold, especially if somebody accidentally went too fast with their therapy and it's like I need some support around this. We might flush them out with that and then do IV hydration with some nutrients. Supporting other systems, so if their adrenals are shot or their fibroid is struggling, all of those are gonna affect immune function, inflammatory buffering capacity, and detox capacity. So the degree to which we can support those and make sure they're functioning optimally, the better position somebody is gonna be in as we kind of guide them through the antimicrobial process.

#### Robby Besner PSc.D.

Is the IV treatment that you, I'm familiar with it because we actually did this ourselves with a top IV guy, he was actually in Texas, in Las Cruces. He is no longer with us, but he was one of the top IV guys in the country at the time. And he did not only ozone therapy in the cleansing, but he also used UV light to do the same thing, to create that little dial for separating out the microorganisms. But what's interesting for people to know about the ozone side is that many of these microbes have challenges with oxygen, right? And so, when you give them oxygen therapy, there's actually a die-off from that oxygen therapy that you give them, as a way to lower the population and again, lower the symptoms. All the co-infections in Lyme, they're really perfect organisms because their number one purpose is to replicate almost like a virus, like you



see other parasites and so forth. And then in the process, they die off and that's obviously a toxin, they're carcass, whether it be microscopic or not. And then they actually give off a poop, that's their normal process, right? While they're still driving, and then they use your life resources and they just multiply, that's all their function is to do. And our immune systems, when they're healthy and vibrant and strong, basically they keep the micro population somewhat in check. And I've often even said to my daughter that you may always have Lyme, but if you're not symptomatic and you're living purposefully, it's just a label like any other diagnosis. So we focused away from actually the heart of feeling bad and having either a chronic or an acute challenge of sort, health challenge, and mostly on the big picture of why we're here in general, I call it earth camp, why we're in earth camp, what's our purpose, what's our bliss, right? So, and when we're not feeling great, we're prevented from following that purpose or following that bliss, making the contribution to your family, whatever you love in life, right? The education pursuits or even your religious and spirituality part. You're robbed of all of that. And we have to get them back on track. And there is that balance. And oftentimes when you are chronic and you find someone like you in your clinic and the various different protocols you have and it's working, you wanna keep doing it and maybe overdo it a little bit in the beginning.

And so like for us, what we see in clinic is I'm constantly saying, hey, slow down. Yeah, it's almost like, imagine if you were a mountain climber and you're climbing this toxic mountain because these microbes, when they die off and when they poop, these are all toxins, we've got environmental toxins, so we're climbing this toxic mountain slowly every day, one step at a time. Now it's really hard to fall on your face when you're climbing up. But when you're coming down, if you take giant steps coming down when you took baby steps going up, it's really easy to fall. And that's kind of where I see it's important as practitioners to get people to sort of slow down and realize this wasn't an overnight event, and that it will take a while to unravel it and get your body and yourself back on track. So, we spent so much time today and this is really awesome. And you've mentioned a few times already, while we've been talking about mast cell exposure and syndrome, can you tell us what that means exactly for people that don't know, and how you make the distinction between mast cell activation syndrome and just Bartonella as it sits by itself?



Yeah, that's a great question. So mast cells are a type of white blood cell that developed primarily to fight parasites. What we find is that, so our immune system developed an ability to fight bacteria and viruses, which are very small organisms. We call that a TH-1 immune response, and our immune system actually will make hydrogen peroxide, it'll do other things as well but it'll make, it basically orchestrates a fairly aggressive assault, but these organisms are so small that it doesn't cause too much issue for our body, at least under healthy conditions to deal with. When we're dealing with organisms that are quite large like worms, macroscopic parasites, that type of immune response would actually kill us. And so our immune system developed an entirely different type of response called a TH-2 response, to attack those worms and mast cells are the key players in that response, and they release histamine and hundreds of other inflammatory signals that are involved in orchestrating that type of response. The challenge in folks with Lyme and co-infections, as well as parasitic infections, which may be considered part of that co-infection umbrella, is that that type of the immune response becomes overactive. The mast cells are acting as guardians or sentinels at the barrier surfaces of the body, whether that's the skin, the surfaces of the respiratory tract, the surfaces of the gastrointestinal tract, and any time there's an inflammatory stressor on top of an already overwhelmed environment, you can have an overactive sentinal response from these mast cells.

That may show up like classic allergy symptoms. It may show up as neuropsychiatric symptoms, such as anxiety, insomnia, depression, brain fog, especially brain fog, right after treatment or during treatment. And it's often been referred to by others as PTSD of the immune system. And I love this analogy because it speaks to just how interrelated the immune system and the brain are, when it comes to the overwhelm of living with these chronic infections or treating infections too aggressively, too quickly. So I've seen mast cell activation syndrome developing folks who have infections that get diagnosed late and treated late, and then maybe they have some mold exposure and things like that. I've also seen in patients who maybe had an infection and then did heavy hitting IV antibiotics, without adequate anti-inflammatory buffering support, without adequate detox support, without anti-histamine and other mass cell stabilizing support, and it triggered mast cell activation syndrome to develop. So what is it as a syndrome it's an overactive response of these white blood cells, that are primarily designed to fight parasites, when either we're fighting too many parasites or we're not fighting enough parasites, oddly enough, you develop these allergy-type syndromes that would show up as asthma, eczema, seasonal



allergies, and then you have mast cell activation syndrome, which is an extreme version of that. So anytime you're stressing the immune system too much, you can see it. And then our goal becomes how do we decrease that response? How do we get rid of the excess histamine? How do we stabilize things, both from an immune perspective and from a neurologic perspective? Because we know mast cells in the brain are intimately related, as well as our peripheral nerves coming out of their brain, in order to then be in a place where we're steady and stable and can tolerate any antimicrobial or detoxifying treatment going forward.

## **Robby Besner PSc.D.**

Wow, it's almost novel to me, because what you described is what we talked about a little earlier, about the order that you do things and makes all the difference, right? So if somebody presents themselves with an overactive mast cell syndrome response, if you were to dive in and do your normal Lyme and/or Bartonella co-infection protocol at that point, would be somewhat inappropriate because it's almost like I hate the, oftentimes used, the analogy of throwing kerosene or gasoline on a big flaming fire, right? But certainly, that's gonna create another cascade of responses, but again, you're listening to the patient, you're seeing how they present themselves, you're taking a little history, you're looking at an integrated approach and functional, which is bringing all these different tools to diagnose as well. And then you set up your pecking order, what you need to address first. But to quiet the body down and to enhance the immune response, your detox pathways seems to me like they say in Texas, a chicken winter dinner. So it just makes way sense to me that you're just creating that primal platform, that whether you're very symptomatic or just slightly symptomatic, it really addresses creating a good foundation for a sustainable health, not just to manage the Lyme and/or Bartonella as is presenting itself today. Thank you for that explanation, I think it's misunderstood, and I love the way you characterize that because these are all natural responses that the body, there are different systems that the body's created to protect us and for us to survive. And generally speaking, all these microorganisms, they all live in harmony in the body. And there are many bacterias, more than 60,000 that are in our GI track that our principal to create, to help us with our digestion. And so we in evolution have lived very, very comfortably with our external environment, that biome, and now we're discovering way more about the interface with our internal environment. And now we're fine tuning it when it goes a little bit haywire, then we've got a disproportional amount of microbial activity, creating symptoms and creating syndromes and demand, right? So, wow, a lot of stuff.



That's where I think the awareness of and compassion for the wisdom of the body is so important, that this is an elaborate ecosystem that's doing everything that it can to maintain a state of balance or homeostasis, and defend against anything that might be too much of a disruption to that. So when we listen to that in ourselves as we go through treatment, we get a lot, there's a lot more spaciousness around what our expectations are and kind of how things go without regards, so just wanting to hope you don't mind put that.

#### Robby Besner PSc.D.

No, that's why we're here today. We're nearing though the end of our time together. And I just was wondering, we got technical, we dove a little deep. Some of the people that have tuned in today, they're just saying, well, what can I hear from Dr. Plante today that I can use tomorrow? Maybe I'm not feeling so great, give me some inspiration or I'm feeling really good, but I know I've got underlying challenges and I'm working through them, what can I do to sustain my health right now? You've given us some tips like vitamin D deficiencies, that's a big one on my list because oftentimes, people with chronic challenges, their vitamin Ds are like 15, one, five. And we've noticed that if you can, takes a while to do it, when I first started my vitamin D therapy, unless you do a IV cocktail where you're doing concentrated therapy with vitamin D and you're under a practitioner's care, but if you're just doing an, it took me almost six months to go from 45, my goal was to get to 8,500, that range. And I'm in South Florida and I'm in the sun all day, and my skin and my photoreceptor is getting plenty of opportunity to get sunlight but even so, I still wanted to dial it up some more. And for people out there, oftentimes Lyme patients and/or Lyme patients with co-infections, they'll have very low vitamin D depleted, maybe it's part of the organisms, the microbes, actually, that's another kind of life vital resource that they lied to, and so they're robbing it from you. And so I love that you went there with that list because I think it's an important one for people to just be generally aware that there could be imbalances in those vital nutrients, like collagen, for instance. That is the reason why you're symptomatic. We know the root cause is going on, but why are you expressed and how are you expressing yourself? So can you offer me your Lyme patient now, 'cause I just joined your team? What could you offer me to give me some inspiration or a simple tip or two that I might be able to use and integrate into my life as early as tomorrow?



Yeah, so I would start by saying it's so important to remember that there is always something that can be done, no matter where you are in your process of life. I work with the full spectrum of patients, young, vital, healthy people who got bit by a tick, and then are experiencing acute or subacute symptoms, all the way to somebody in their mid to late 60s or 70s, who's had Lyme and a variety of complicating factors for their entire life. And from my perspective as a naturopath, I don't think we should ever say there's nothing more we can do for you. Whether that's, maybe if a person at that later stage, the best thing for them wouldn't be antimicrobials, but support for their mitochondria, support for their gut, support for their brain, that kind of thing. And so, what I would offer at least broadly is one, that message of hope that, don't give up, there's always something that you can do. You may need some assistance in terms of finding out what that is, and that's totally okay. But if you're like, I'm tired of Lyme treatment, I flare every time I do it, I don't wanna see a Lyme doc because they're just gonna tell me to kill my Lyme again. And if I don't do that I'm not gonna get better, and I really don't agree with that approach. I think there is so much that we can do, I've seen people do really well when we didn't even touch their Lyme or their co-infections. We just supported their gut, we helped heal the lining of the gut.

A lot of folks who have Lyme have gastritis or inflammation of the stomach and intestinal tract, just healing that with soothing mucosal support, deep glycerides of native licorice, things that don't flare most people, aloe juice, that can be helpful. Getting somebody's adrenal system back functioning, a lot of times the thyroid is under-functioning. Now, that can be dialed technically by getting labs done, but even just gentle support like multi-minerals or herbs that support the adrenal glands, most folks don't flare with those if they go at a relatively low dose. So foundations first is big. There's always something that you can do, start where you are, if you don't quite know where you are, talk to a provider who maybe know, who can maybe help you find out, oh, we'll run your TSH and check your thyroid. Oh, whoa, it's under-functioning, we need to support that, or oh, wow, you're tired in the morning and aren't sleeping good at night and having a second wind at midnight, you probably have circadian rhythm or adrenal dysregulation, we need to support you there. And so, that's where I see the biggest strides in some of the most challenging cases, where people are just hitting that wall of, every time I try to kill these infections, I feel worse, I don't even wanna do treatment, I'm just gonna live with this and accept my fate, I've heard that a number of times. And I always try and encourage them, even if we just did gentle IVs, even if we just hewed your gut, even if we, dial that in, that can make a huge difference in



your quality of life. So that's kind of what I would say in terms of, there's not really a one size fits all way to do that, unfortunately, but there are Lyme and complex illustrations some of the most educated folks that I have worked with, they know more than most doctors, I've met folks who know more than I do, so there's no shortage of resources but we're here to help you if you ever need any guidance in terms of nonimmune or non-antimicrobial ways to just improve your quality of life.

#### Robby Besner PSc.D.

Amazing, and it is a system and the system, your body is complex and made up of different systems that, they're brothers and sisters and relatives, and they all talk to one another, and if one's hurt and there's sometimes like, there's a pretty famous doctor, Dr. Jerry Tennant, who talks about electron donors and quadrants, and if there's a deficiency of electrons over here, it grabbed him from here. And so there's really a very strong connection to all of these systems. This has really been terrific, before we go, I do need to ask you, because you created an amazing concept that you call BioReset. It's something that I think is gonna take the country on rage, you have a clinic, I think you're currently in California, we've talked about you setting up something on the East Coast. This is something that you might be able to, it's not quite cookie-cutting but you might be able to create in other major cities, the same kinds of concept and approach that you guys have come up with. Could you just spend a minute before we close and just talk about BioReset, and then if you can remember Dr. Plante, I would really love for you to just tell us how we can get ahold of you? What's the good contact points? Your website, I had a chance to look at, it's amazing. And then the phone numbers, emails, and all the ways that we can get ahold of you. So tell us about the BioReset profile or program?

### Brian Plante, N.D.

Yeah, absolutely, so BioReset medical was started by Dr. Matthew Cook, who was actually an anesthesiologist by training. And his specialty is not only supporting patients alongside me with complex chronic illness, but also managing chronic pain with highly targeted ultrasound guided injection therapies. And we do a lot of IV nutritional therapy and IV ozone therapy at our office. We have folks come to our office from all over the country to do what we call, destination, I don't know if this is a technical term, a destination medicine. And then we support them with functional and integrative medicine kind of as they're coming in and as they're going out in terms of supplements, medications if needed, diet, lifestyle, all that social support, but people



will often come here for a few days and they'll do IV nutrients, they'll do IV ozone, I've mentioned ozone plasmapheresis but there are a few other variations of IV ozone that we do. And we find these to be very supportive, in addition to the things that we had talked about today, of folks with complex chronic illness. Currently we're in Silicon Valley and Campbell, California, which is just south of San Jose. We are available for telemedicine. Now, I'm licensed in California only, but Dr. Cook is licensed in almost all 50 states. So we do support folks across the country. And we collaborate with other doctors across the country. So if you're working with a doc and getting improvement in certain areas, but need a specialty opinion on what is regenerative medicine and what does functional and integrative medicine have to potentially offer me to go alongside that, we love that, we love supporting folks with that. So, we have a growing team of doctors right now, and our hope is that we're gonna be opening practices throughout the country over the course of the next few years. I joined the team about six months ago. So, I wanna point things back to Dr. Matt Cook, he's our fearless leader but we work as an integrated team, and we really love what we do, working on the frontier of regenerative complex chronic illness care, and we're seeing some promising results. The contact.

#### Robby Besner PSc.D.

BioResetmedical.com, right? All spelled out, B-I-O-R-E-S-E-T medical.com. Is there like a number or some other way in like an email that, the info@bioreset or.

### Brian Plante, N.D.

Frontdesk, which is one word, frontdesk@bioresetmedical.com. There's also a contact form on the website, our phone numbers on there, you can just fill out the form. We'll have either one, somebody from our front staff reach out to you, we also have a few patient care coordinators and managers that will, if you're like, I have questions about what you guys do, I'd really love to learn more about it. I've heard maybe I can fly in for a week and do some treatment, we'd be happy to answer your questions, set you up with a consult with one of our doctors and kind of talk about what your unique plan is. We really try to walk that well-rounded middle way of individualizing things as much as possible, while still having a bedrock of solid patterns and protocols that we use, that we can say, well, this works for most of our folks, but we might dial it for you as a unique individual. So, we're happy to be supportive that way, but our website is probably the best way to get more information about what we do and how to contact us, and that's bioresetmedical.com, all one word, no dashes or spaces.



#### Robby Besner PSc.D.

Well, very enlightening, loved talking with you today. You guys are really on to something, I love your integrated functional naturopathic approach to the equation. You seem to put things in the proper order and just like every day we wake up and we get dealt a series of cards, that's how the body works, and how you shuffle those cards and organize them, that's what the brain does a trillion times a day. And so I just like that you've taken this sort of systematic holistic approach, but then you really dial it in to manicure a protocol that's appropriate for the way my body is responding today. And I think that's unique, I love what you guys are doing, I really appreciate you coming on and spending the time with us today, and joining Healing from Lyme Natural Summit. Thank you again.

### Brian Plante, N.D.

Thanks so much Robby, pleasure speaking with you.

### Robby Besner PSc.D.

Hey everybody, it's Robby Bessner, thanks so much for joining us today. Please share this content with anyone that you think might benefit from it, and we're looking forward to having you with us tomorrow for another great interview.