Podcast Introduction and Guest Welcome

but nothing concrete looking at when this population of children with autism, tick-borne disease, was found in X amount of child. Yeah, something that definitely needs to be studied.

Absolutely. If this link were established, this more cause and effect, how do you think that would change the course of treatment or the focus of treatments with children on the spectrum?

I think it would change their lives. If we address the underlying infections, they might not need those antipsychotic medications, right? Because we're actually helping their system get healthier.

Hi, and welcome to the Lime Bites podcast, where we shine a light on the misunderstood science of Lyme and other vector-borne diseases, as well as the truths that many still miss.

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

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 We share the facts that most people miss, We challenge outdated thinking, and we give both patients and practitioners the tools to heal smarter.

So let's get into it and change the way we heal Lyne. Hi, and welcome to another episode of the Healing Lines Summit. I'm your host, Dr. Mariah Hinchy.

And I am so excited to have with us today my very good friend and colleague and naturopathic doctor, pediatric specialist, Doctor Lindsay Wells. Welcome, Lindsay.

Tell us a little bit about yourself and how you became a pediatric specialists who specializes in treating tick-borne disease. Well, thank you so much for having me here today.

I'm an atropathic doctor, I practice in Wilton, Connecticut, and I specialize in complex medical conditions for pediatrics, mainly pan's pandas, tick-borne diseases, as well as autism.

Dr. Wellsu2019 Background and Path into Pediatric Care

And so how I got into this, it's interesting. My reason for getting into medicine was actually to try to keep families together. That is really my goal.

And so working with the special needs population and working families who have children who are struggling, there's a very high rate of divorce there.

So I actually thought maybe it would be good to kind of go into pediatrics as a way to make like a big influence not only on the child but the whole family structure.

And when I was going through my clinical rotations, I working with adolescents with autism. And there was one male in particular, and he brought so much joy to everyone around him.

I thought to myself, if I could work with this population every day, I'd be very happy. And so that really is what kind of started my journey into pediatrics.

Then it kind just evolved to Pans Pandas, and then you can't treat PANS PandAs without treating tick-borne disease, especially on the East Coast, even though it's everywhere.

But that's kind-of my Journey into my specialty and my practice right now. That's amazing, that's a great story. Alright, so let's dive into, for our listeners who don't know what autism spectrum disorder is, can you tell us a little bit more about that diagnosis?

So autism's spectrum disorders, I really believe it's more of an autoimmune disease. Autism is a multifactorial disorder. dynamic changing type of diagnosis, right?

So a lot of people will think that it's purely genetic, or it really is just a neurodevelopmental disorder. But in reality, it impacts the whole body.

And so how I approach autism is I kind of look at it in four different categories. I look the mitochondria, which are the parts of our cells that produce energy that the body runs off of.

In children with autism, there's a very high rate of mitochondrial dysfunction at 60 to 80%. I look at the immune system to see if there are any underlying infections or any abnormalities in the system that could be contributing to inflammation.

I also look the gut, a huge piece of the puzzle for children of autism. And then also looking at metabolic systems, so how are they detoxing and whatnot.

My approach to autism is a bit different because I don't believe that it's just genetic. I believe there's a genetic predisposition, but it is the environmental kind of triggers that cause the manifestation of autism to present.

And so it really is full body type of diagnosis and you can make significant improvements when addressing those areas of the system. I couldn't agree more.

Autism as a Whole-Body Condition

It's interesting because when you're treating tick-borne diseases, I would say that those exact areas are the areas of the body that have to have a significant amount of attention paid to them and you have optimize or heal or give function back to those systems in my opinion, in order to be able to resolve these tick-borne diseases as well.

So it sounds like you're taking someone that's already almost like hospitable or primed for these infections to thrive inside of them. And then, you know, it's kind of like throwing fuel on the fire.

But why don't you jump into, because we're going to pay a little bit more attention to the infectious organism Bartonella for your lecture today. So tell our audience a bit about Bartinella in general, and then we'll talk more about the interaction of Bartinella in autism spectrum disorder.

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So join us at Pompano Beach or virtually from anywhere. Register now at lymebites.com. That's L-Y-M-E-B- Y-T- E-S dot com. So Bartonella, this is a vector-borne disease.

And I'm going to say that rather than tick-born disease, because there's about eight different known vectors on how we can contract Bartronella. But Bartionella is bacteria.

It's gram-negative, it's a pleomorphic rod, and it has a pretty fast division time of 24 to 48 hours once we get infected. I think I really am. Almost like obsessed with it, I would say.

because it's just so interesting to me. It is so smart, I guess. So, it can infect so many different cells in our body. it Can infect our endothelial cells, our erythrocytes, It can affect our microglia cells our macrophages, and then that has a huge impact on the immune system.

But not just theimmune system, all these other different systems in the body, the cardiovascular system neurological system the skeletal system muscular system, endocrine system.

It amazes me how this germ can infiltrate the body and cause such havoc on the system and it can stay there for such a long period of time because it loves life in human bodies, right?

And so that then masks so many different illnesses that people get the wrong diagnosis when in reality, Bartonella truly is at the core.

Bartonellau2019s Role in Chronic Illness and Autism

And I really believe that Bartonella is at the root cause of the majority of chronic illness, not only in pediatric population, but also in the adult population.

And it does contribute to autism spectrum disorder in my clinical experience as well as my personal opinion. fascinating. Yeah, there's been a lot of work in other adult sort of facets with Bartonella infection causing a host of other chronic diseases, even implicated with cancer.

Absolutely. I thought the most recent one that I though was interesting was Hashimoto's, right? Like how many people in the world are impacted by thyroid conditions, especially women, and that Hashimoto's has been associated with Bartenella, which is not one people really think about.

And in my practice, When I have these really difficult Hashimoto's cases, every single one had Bartonella. And when we started to address the infection, their markers got better.

It's very fascinating. Yeah, it is fascinating I think at some point we're going to realize that there is some sort of infection kind of like at the root of almost every product disorder that we have.

Okay, so can you talk a little bit about the mechanisms in which Bartonella would either exacerbate symptoms of a child on the spectrum or how it could actually like ignite the development of autism spectrum disorder?

Right. So when I talk about how autism may be an autoimmune disease, right? So what's happening in the system is that there is inflammation and too much inflammation that is occurring.

And therefore, the manifestations that we're seeing is because of that elevated inflammation, that doesn't end up coming back down into homeostasis or to baseline.

And so what's happening is when somebody gets infected with Bartonella, it's gonna then infect the cells quickly, the ones that I mentioned previously.

It then kind of forms like a protective layer around itself so it can't be destroyed. So those cells that it infects, they continue to live and they continued to multiply, right?

So immune system has a very difficult time getting rid of them. Then causes it to kind infiltrate other systems. And this really makes me think about the cell danger response.

I don't know if you've heard about the cell danger response to the listeners, but it is fascinating. And essentially what the Cell Danger Response is, is that when there's stressors on the system, what happens is there are many different cellular changes that occur within the systems.

It causes one's immune system to be heightened constantly, and again, not able to come down and back down into homeostasis. So what happens is as the person continues to be exposed and triggered by many different things, the inflammation keeps rising and rising, and symptoms continue to progress.

And so it just makes me I believe that Bartonella underneath or any other type of infection just causes the cell danger response to continue to heighten, which then manifests more into symptoms.

And that's what we see with children with autism, right? Why they might be more severe or the symptoms continue change, like they don't just stay the same.

So it really comes down to the immune system, it comes to inflammation, And what's also interesting is the fact that there could be gestational Bartonella.

That is a possibility. And so these children are being born with this infection. They're already at somewhat of a disadvantage. So what happens is their immune system is already heightened and susceptible.

continue to come in contact with certain things. And we live in a very toxic environment. What can happen is it just builds and builds until, unfortunately, the manifestation of the symptoms, which will present possibly with autism.

There are neurodevelopmental disorders. Now that could be ADHD. It doesn't have to be as severe as autism, it could present as anxiety, oppositional defiance disorder.

Symptoms and Red Flags for Bartonella in Children

The list can kind of go on and on. So that's how it really involves the immune system. here. Yeah, and it's a continuous spectrum. Like when I think about it, I'd think of all of those things kind of like on the same spectrum and like how many symptoms you have and how severe the symptoms are can really depend on your internal and external environment and what those triggers are.

And as you said, can constantly be changing, right? It's fluent. You can have severe and mild and all over the place depending on what else is going on.

Absolutely. But you started talking about symptoms. Can you be, I know it's hard right, like teasing the symptoms apart because there's a lot of overlap, but like how would you sort of like categorize like here are the systems of Bartonella and you know don't forget the hallmark symptoms and then here our symptoms more just like generally seen in autism spectrum disorder And what would red flags to you be where you're like, I very highly suspect Bartonella in this child?

Are you suffering from Lyme disease or another complex chronic illness and aren't sure who to trust when it comes to herbal supplements? Hi. I'm Dr. Mariah Hinchey, founder of Lime Core Botanicals.

As a naturopathic physician specializing in complex, chronic, infection-driven illnesses like Lyme disease, I needed herbal medicine I could truly trust.

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

Learn more at LymencoreBotanicles.com So you have to take a good medical history regardless, right? And that also comes with mom's history too, like getting a family history, I think can be very important, especially with the mother.

But when it comes down to symptoms of children with Bartonella, and I'm going to focus on children here, what I see in children, the biggest one would have be aggression and rage.

So if any child has aggression or rage, you absolutely need to be ruling out Bartronella. that then can manifest with anxiety or OCD or depression. But I also find a big one can be like heel pain, foot pain which is a hallmark symptom for Bartonella.

And so you really have to think about the children with autism that toe walk. Why are they toe walking? Like, of course, there's so many different reasons.

There could be, it's a sensory input type of thing. It could even be a learned behavior if mom or dad or another sibling is toe-walking, right? But is there a pain there?

Is that why the child is toewalking? And so that would be for me, like, okay, we should really be ruling out Bartonella for this one in particular. Sensory sensitivities are a big one also for Bartonella, so sound sensitivity in particular, which again, you can see a lot in autism.

So if I have a child that really has sensory challenges, I will rule out tick-borne disease, particularly Bartronella. I also, stomach aches are a big one and headaches.

And for children with autism, it can be very difficult if they're nonverbal to express what's bothering them. But for a child with Autism, if the are aggressive, the first place you really do have to look is their gut.

Again, maybe they are having stomach ache or stomach pain because they have undiagnosed Bartonella. And so those are pretty big ones that I see when it comes to Bartonella.

And then with autism, of course, other symptoms that you might see is more like stimming-like behaviors. It could be, again, social interactions can be very challenging.

Verbal communication can difficult in general for them. Then, it's just a lot of difficulty with connecting and restricted interests and whatnot. So there is a lotta overlap.

But I think the big ones for me with a child with autism, when you want to look for Bartonella, it's the aggression and the rage. It's, the toe walking.

If mom has some sort of like, something in the history that seems off with mom, like possibly she has autoimmune disease of some, any sort. And if she has a history of tick bites, if the child had a story of a tick bite, of course, or they have cats in the house, I think it's important to look for.

And I really just truly believe, like, when I first started practicing, autism was like I thought autism out here and tick-borne disease was out there.

And they were totally two separate things. But as I've been in this field for the period of time that I have now, it's like they're completely overlapped.

And it almost to the point where I'm telling every single family that comes in with autism, you have to rule out tick-borne disease.

like specific on which ones, it's Bartonella, Borrelia, and Babesia. Those are the three that I find to be the most important. And in my practice, personally, more children come up with Bartronella than any other infection.

But it almost like I think it is a blanket thing that if your child has autism, you should be testing for tick-borne disease. Yeah, I agree, have a very similar situation.

I started specializing in autism spectrum disorder like 15 years ago and then fully like just swung over to tick-borne disease. And then, you know, now with pans and pandas and just all of it.

There's so much, yes, vector-born disease intermingled with all these complex chronic medical conditions. Do you want to elaborate a little bit because we're dancing around it?

What are the vectors that you, so obviously there can be some congenital, right? We know tics, but what are other vectors can transmit this so that our listeners know what to be on the lookout for?

So there's eight known vectors right now, and I think there are many others that we don't know about yet, but eight know and you already just mentioned two, ticks and gestational.

And then the other ones are going to be mosquitoes, which who isn't exposed to mosquitoes? There's been some case reports on spiders, lice. I mean, that's just like for children.

It's like you get lices, as well as fleas and sandflies and cats. Cats are the big one. Of course, Bartonella is known as cat scratch fever, but that's only one species of Bartonella, Bartenella hensilei.

So there's many other species as well. I'm going to digress for one moment. Can you just share with our listeners what labs you would recommend or you use to actually get accurate testing for Bartonnella and for more than just Bartronella hansilea?

Yeah. So that's a great question. I really use specialty testing for Bartonella. The reason being is when you use the standard labs, so I'm talking like Quest and Labport, right?

They're really only looking for bartonellahensile or bartonella quintana, which are two most common species, but there are many more species. So like there's over 36 different species about half of them can cause infections in humans or in dogs.

And I would say that there is really like six that are the most prevalent in human that I think can because the manifestation of Bartonella and disease.

And so when looking for testing for this, I guess I use igenex labs for Bartonella, and I will also use Galaxy. Sometimes in certain families, it will actually do both because unfortunately they don't all cover all six species that I'm looking.

But if I were to choose one I really do use I find them to be the most accurate. And so I feel more comfortable when I get a negative from either of those, but like, okay, this is truly a I'm like, this really doesn't rule it out because there's such a high, a false negative rate, right?

That it's really just like this is just a screen. And if it comes back positive, it is truly, truly positive and we really don't need to continue to do the more higher level type of testing that costs more money out of pocket.

But it also, just delays treatment, in my opinion. If you're just going to do the standard lab work and then wait to see if that comes back, we're then going have to yet another blood draw for a child with the more specialty labs.

And then that's really when we can determine is this a positive or is a negative. I'm sorry to mention that, right?

Because we can get infected at any time.

So just because you had a negative from maybe a specialty lab years ago, that doesn't mean that there's not tick-borne or vector-born illness now. And so that's also something that is important.

I think you really have to share like a detailed medical history with the provider in order to kind of get that to understand that we could get an infected anytime.

Yeah, that's a really, really good point. So Dr. Wells, I'm going to have you share with our listeners how and where they can find you and if you have any special events or exciting news.

Why don't you go ahead and do that. Okay. You can me at my website, www.lindsaywellsnd.com. This has all my different offerings. If you want to become a patient of the practice, or I have a course for parents on PANS and PANDAS where I do mention tick-borne disease in it.

I also have membership for Mothers. It's called the Well-Minded Mamas Club and I love to get mothers of children who have complex medical conditions together and it's a beautiful community so you can find me there and also on my Instagram at LindseyWellsND and i love post information particularly about Bartonella.

And so, there's pandas and autism, so if you love the research and you want more information, that's a great place to hang out with me. Dr.

Treatment Impact, Parent Guidance, and Key Takeaways

Wells, can you tell me, statistically speaking, has anyone done studies to look at if there is a higher incidence of Bartonella in children with autism spectrum disorder versus the general public?

No, they haven't, and I wish they would. But again, I think the mainstream medical system really still views autism as a genetic disorder. And so I that makes it very complicated as to why there's not many more studies done on autism.

So many different topics, right? But one of them in particular, infectious in nature and it being tick-borne disease. However, there has been some studies, sorry.

Excuse me. So there was a case study that was done recently. It just came out actually this year that looked at a boy who was diagnosed with autism, developmental delays, as well as Pan's Pandas.

And when he started to treat for Bartonella, what happened was his opposition and aggression completely resolved. He moved from a special ed classroom into the mainstream classroom.

his IQ score improved, and he was accepted into a four-year university program, which previously was not likely part of his plan. And so it's case studies like that that are important, getting the information out there.

But it is also like, this is what we're seeing in clinical practice every single day, right? Where we are seeing significant improvements in these children.

when we're actually addressing and looking at them as an actual person rather than a diagnosis, right? And so there are studies that have given some medical hypotheses about possibly tick-borne disease contributing to the manifestation of autism or the vulnerability or susceptibility to autism, but nothing concrete looking on this population of children with autism.

Tick-born disease was found in X amount of Yeah, something that definitely needs to be studied. So if this link were established, this more cause and effect, how do you think that would change the course of treatment or the focus of treatments with children on the spectrum?

I think it would change their lives, I would think change the family's lives because right now with children with autism and again the mainstream medical society, it's just like how to keep them comfortable while decreasing some of their symptoms, right?

So a lot of that has to do with antipsychotic medications, right, that they're really using. When in reality, if we address the underlying infections, they might not need those antipsychotic medication, because we're actually helping their system get healthier, so it's then not manifesting with the aggression, the rage, anxiety, fight or flight type of presentation.

decreasing the load off of their system to the point that maybe it doesn't progress to other things like epilepsy, right? That's very, very high in children with autism and young adults with Autism.

Again, if we're taking down the loads from their systems, it's possible you won't need those higher level interventions. And we really just have to, again, get at the root, to get rid of the infection.

That naturally decreases the inflammation. which then will decrease the symptom presentation. Yeah, absolutely. You know, I'm sitting here and I am listening to you talk and it's making me think about the movie Spellers that I just watched like a month ago.

And it is like, so even for someone who like is in the know and have been in know since I literally since graduating from medical school and still like I sat there watching that movie and was like wow you don't know anything.

For any of you guys watching who haven't seen the movie Spellers, you have to watch it. It makes you view Autism Spectrum Disorder and I get goosebumps thinking about it in such a different way.

Such a powerful movie. But Dr. Wells, what advice would you give to caregivers or parents with a child on the spectrum, just in general, but also regarding Bartonella?

And if they're, after listening to this, maybe suspecting that Bartronella could be a piece of the picture. My advice would be you have to rule it out and you to do the testing that's necessary just for peace of mind because it could change the whole entire treatment plan and regimen that you're currently undergoing with your child.

And you won't make as much progress in other treatment areas if you really aren't addressing these underlying infections. That's also what I've seen too, right?

It's like you can be doing all the gut stuff, all of the mitochondrial stuff. All the immune stuff but if your not actually addressing like one of the root cause or the route cause, you're just not gonna make as much progress and you just might plateau, right?

Or if you've seen good progress, but you plateaued, look for it. Just explore a little bit deeper and work with somebody who truly understands tick-borne diseases as well as autism spectrum disorder.

And the other thing is, and this is one my biggest things is like you also have to make sure you are taking care of yourself because our children, they are so sensitive to our energies, right?

So like if we're feeling super stressed or we are anxious or upset about something, they pick up on that. And I've seen so many times when a mom and a dad is feeling better, their child gets better without even doing many interventions.

with the child. And so I just always like to kind of put that out there, that your health, your wellbeing, and your mindset, they matter and they matters for your child and so we put everything into our children, but we also have to remember like we have fill our cup too and that will benefit everyone around us.

So those are probably my biggest advice for parents. And those are so important and not things that, you know, that we talk about a lot and things I think definitely need to be heard because most parents are just running around,

especially parents with children of special needs doing, everything, the whole focus is on the child.

So that's really good advice. Okay, so bigger picture. What do you think are, let's say, the top three most important take-homes when you are dealing with a Bartonella infection in a pediatric population?

The biggest take homes are if your child is suffering from any type of neurodevelopmental disorder, if they're suffering a neuropsychiatric disorder. You have to rule out Bartronella in particular.

And I also think you can then go down the line of looking for other infections like Babiesia or Borrelia, but Bartonella for sure. One thing I didn't mention that I see a lot in children is the stretch marks, right?

And a lotta times people will say, oh, that's just growth, the pediatrician says it's growth. But really, you gotta look at those too, because if your child is suffering from any of these symptoms that we were talking about, they have the stress marks.

You have to rule out Bartronella as well. And then the other thing that I would say is with autism, it's not just, again, a genetic medical diagnosis.

full body, and there is a reason why a child manifests with autism and has this diagnosis. And as the diagnosis criteria has kind of widened, right? And I think that's why, a lot of people say with Autism, like, you know, the numbers are so high because the diagnostic criteria have widen, so more children fit into that category.

But you also have to think about these infections too. these infections are becoming smarter and there's more exposure to them. So as the diagnosis has increased, the numbers, so has I think the rate of infection as well.

And so there is a correlation there as, well and so I, think those are pretty important things. It's just you have to rule it out. If your child has autism, you need to know that they're not suffering from any tick-borne disease, in particular, Bartonella.

Have you had a substantial number of cases where once you have as close to being sure as you can, right, because you could never be 100% sure, but as closed to sure a complete eradication of the infection.

Have you seen children lose their diagnosis? Yes, I have. But again, it can be complicated for children. And I think it depends on where you are in the journey a bit, what you've done, and what else is there.

My thing is, our kids are getting sicker by the day, to be honest. So it's not just usually one infection, right? Sometimes it is multiple infections.

Treatment is long and it requires a lot. I, you know, it's not just how I go about treatment is with antimicrobial herbals and we're talking like I treat for a year plus, right?

And so it does take a lot of commitment and patience, and so with that, You see a LOT of improvement in that period of time. It's just you have to stick with the treatment and you gotta make sure you're hitting all aspects of that child in particular.

So it's not just like, okay, you can't just do the infection. You also have put in some symptom support. you also has to put some immune support to decrease inflammation, decrease histamine levels, whatever it is for that particular child.

It is usually a complex treatment plan that requires commitment and patience, but you see progress. And it's amazing the results that can come from it.

Yeah, it is amazing. OK, so before we end, let everyone know how and where they can find you again. Okay, so you can find me at my website, www.lindsaywellsnd.com.

You can also find my over at Instagram at lindsaywellnd, sorry, at instagram at Lindsay Wells ND. I talk a lot about art and EWA as well as autism and pans pandas.

And I love to post the research because I'd love read about it. So if this information is interesting to you, I would love you to see you over on Instagram or if you want to work with me, you could find ways to do so on my web site.

Awesome. Thank you so much for joining us. It was a pleasure to interview you. I hope you have a great day. And to our listeners, I