Introduction and Dr. Wells' Background

Welcome to another episode of the Healing Lyme Summit. I'm your host, Dr. Myriah Hinchey, and I'm so excited to have with us today, my very good friend and colleague and naturopathic doctor, pediatric specialist Dr. Lindsey Wells.

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

So I'm an naturopathic doctor. I practice in Wilton Connecticut, and I specialize in complex medical conditions for pediatrics, mainly PANS/PANDAS, tick borne diseases, as well as autism.

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 with 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 very big influence not only on the child, but the whole family structure.

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

And 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.

And then it kind of 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 looks amazing. That's a great story. All right, 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 spectrum disorder I really believe it's more of an autoimmune disease. So autism is it's a multifactorial, dynamic ever 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 at the mitochondria, which are the parts of our cells that produce energy that the body runs off of, and 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's any underlying infections or any abnormalities in their immune system that could be contributing to inflammation.

I also look at the gut, which is a huge piece of the puzzle for children with autism. And then also looking at the metabolic system. So how are they detoxing and whatnot.

So 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's the environmental all kind of triggers that cause the manifestation of autism to present.

And so it really is a full body type of, diagnosis. And you can make significant improvements when addressing those areas of the system. Yeah. 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, you know, a significant amount of attention paid to them.

And, you know, you have to help to 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 little bit about Bartonella in general.

And then we're going to talk more about the interaction of Bartonella in autism spectrum disorder. So Bartonella this is a vector borne disease. And I'm going to say that rather than tick borne disease because there's about eight different known vectors on how we can contract Bartonella.

But Bartonella it's a bacteria. It's gram negative. It's a morphic rod. And it has a pretty fast division time of 24 to 48 hours once we get infected.

And Bartonella it is I'm like fascinated by Bartonella, I think I really am I am almost like obsessed with it, I would say, because it's just so interesting to me.

It is so, smart. I guess it is. So it can infect so many different cells in our body. It can infect our endothelial cells, our retro sites, it can infect our microglia cells, our macrophages.

And then that has a huge impact on the immune system, but not just the immune system. All these other different systems in the body, the cardiovascular system, the the neurological system, the skeletal system, the muscular muscular system, endocrine system.

It is 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 mass, so many different illnesses that people get the wrong diagnosis, when in reality Bartonella truly is at the core. And so 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. It's fascinating. Yeah, there's been a lot of work, and other adult sort of facets with Bartonella infection causing a host of other chronic diseases.

even, you know, implicated with cancer. Absolutely. I thought the most recent one that I thought was interesting was Hashimoto's. Right. Like how how how many people in the world are impacted by thyroid conditions, right.

Especially women. And that Hashimoto's has been associated with Bartonella, which is not one that 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, there, they're there. 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 chronic disorder that we have.

Okay. So, can you talk a little bit about the mechanisms and 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.

Bartonella Overview and Why It Matters

So what's happening in the system is that there's 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 going to 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 infects, they continue to live and they continue to multiply. Right. So the immune system has a very difficult time getting rid of them.

It then causes it to kind of 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 and what happens is that there's many different cellular changes that occur within the system, and 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 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 manifest more into symptoms.

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

And so it really comes down to the immune system. It comes down 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. And so what happens is their immune system is already heightened and susceptible.

So as they can 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 and builds until unfortunately, the manifestation of the symptoms which will present possibly with autism, other neurodevelopmental disorders.

Now that could be ADHD, right? It doesn't have to be as severe as autism. It could present as anxiety oppositional defiance disorder. The list can kind of go on and on.

So that's how you know, it really involves the immune system here. Yeah. And it's a continuous spectrum. Like when I think about I 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 like what those triggers are and as you said, can constantly be changing.

Right? It's fluent. You can have, you know, severe and mild and all over the place depending on what else is going

on. Absolutely. But you you started talking about symptoms.

So 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 symptoms of Bartonella.

And and you know don't forget the hallmark symptoms. And then here are symptoms, you know more just like generally seen in autism spectrum disorder. and like what would red flags to you be where you're like, I very highly suspect Bartonella in this child.

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

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

Okay. So if any child has aggression or rage, you absolutely need to be ruling out Bartonella. That then can manifest with anxiety or OCD or depression.

How Bartonella May Drive Symptoms in Autism

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 toe walking? 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's really has sensory challenges I will rule out tick borne disease, particularly Bartonella.

I also stomachaches are a big one and headaches. And for children with autism, it can be very difficult if they're non-verbal to express what's bothering them.

But for a child with autism, if they are aggressive in the first place, you really do have to look is their gut. And again, maybe they're having stomach aches 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 be difficult. and in general for them, and then of course, it's just a lot of difficulty with connecting and restricted interests, and whatnot.

So there is a lot of 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. It's, if mom has some sort of like, something in the history that seems off with mom, like possibly she has autoimmune disease of some sort, any sort.

And, if she has a history of tick bites, if the child had a history 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 was out here and

tick borne disease was out here.

They were totally two separate things. But as I have been in this field for the period of time that I have now, it's like they're completely overlapped and it's almost to the point where I'm telling every single family that comes in with autism, you have to roll out tick borne disease.

And if we want to really, like, be specific on which one, it's Bartonella, Borrelia and bobcat, those are the three that I find to be the most important.

And in my practice personally, I hope more children come up with Bartonella than any other infection. But it's almost like I think it's a blanket thing that if your child has autism, you should be testing for tick borne disease.

Yeah, I agree, I 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, and it's like, you know, there's so much. Yes, vector borne disease intermingled with, with all of 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 ticks, but what are the other vectors that 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's many others that we don't know about yet but eight known and you already just mentioned to text 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. I mean, it's like you get lice, as well as fleas and sand flies and cats.

Cats are the big one. Of course, Bartonella is known as cat scratch fever, but that's only one, species of Bartonella. Bartonella Hensleigh. So, there's many other species as well.

So 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, you know, to get accurate testing for Bartonella and for more than just, you know, Bartonella? Hansel.

Yeah. So that's a great that's a great question. So I really use specialty testing for Bartonella. The reason being is when you use the standard lab. So I'm talking like quest and lab for it.

Right. They're really only looking for Bartonella hensleigh or Bartonella quintana, which are the 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's really like six that are the most prevalent in humans that I think can cause the manifestation of Bartonella and disease.

And so when looking for testing for this, I guess I use I genex labs for, Bartonella and I will also use galaxy sometimes and certain, families. I will actually do both because unfortunately they don't all cover the six all six species that I'm looking for.

But if I were to choose one, I really do, use, I genetics the most because I find them to be the most accurate. And so I feel more comfortable when I get a negative from either of those that like, okay, this is truly a negative infection, right?

Recognizing Bartonella Symptoms and Red Flags

When I get a negative from the standard medical labs, I'm like, this really doesn't rule it out because there's such a high a false, negative rate, right, that it's it's really just like this is just a screen.

And if it comes back positive, it's 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 it 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 to have to do yet another blood draw for a child with the more specialty labs.

And then that's that's really when we can determine is this a positive or is this a negative. Right. And also frequent testing 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 tickborne or vector borne illness now.

And so that's also something that's important. And I think you really have to share, like a detailed medical history with the provider in order to kind of get that, understand that we can get infected at any time.

Yeah, that's a really, really good point. so, Doctor 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.

Okay. So you can find me at my website, dot Lindsey Wells n d.com. And this has all of 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, a 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 Lindsey Wells and D. And I love to post information particularly about Bartonella.

And so and pans, pandas and autism. So if you're, if you love the research and you want more information, that's a great place to hang out with me. All right.

So Doctor Wells, can you tell me. So 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. Right. And so I think that makes it very complicated.

And as to why there's not many more studies done in autism and so many different topics, right, about one of them in particular, infectious, in nature and it being a tick borne disease.

However, there has been some studies. I'm 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 Pans 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 improves, 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 getting the information out there. But it's also like this is what we're seeing in clinical practice every single day, right? Where we're 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 have there are studies that have given some medical hypotheses, hypotheses about possibly tick borne disease contributing to the manifestation of autism or the vulnerability or susceptibility to autism, but nothing concrete, looking at, you know, in this population of children with autism, tick borne disease contributes to, you know, was found in X x amount of children.

Yeah. Something that definitely needs to be studied. Absolutely. So if this link were established right, this more cause and effect, how do you think that would change the course of treatment or the focus of treatment?

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

So a lot of that has to do with, anti-psychotic medications, right, that they're really using, when in reality, if we address the underlying infections, they might not need those antipsychotic medications, right.

Because we're actually helping their system get healthier. So it's then not manifesting with the aggression, the rage, the anxiety, the, the fight or flight type of presentation, decreasing the load off of their system, you know, to the point that, like, maybe it doesn't progress to, other things like epilepsy.

Right. That's very, very high in children with autism in, young adults with autism. Like, again, if we're taking down the load from their system, it's very possible you won't need those higher level interventions.

And we really just have to again, get at the root, get rid of the infection that naturally decreases the inflammation, which then will decrease the symptom.

Presentation. Yeah. Absolutely.

Testing for Bartonella and Other Vectors

You know I'm sitting here and I'm listening to you talk and it's making me think about the movie spoilers that I just watched like a month ago. And it's like, okay, so even for someone who, like is in the know and I've been in the know, you know, since I literally since graduating from medical school and still like, I stopped there watching that movie and I was like, wow, you don't know anything.

you know, like it was just for any of you guys watching who haven't seen the movie spoilers. Like, you have to watch it. It just it makes you view autism spectrum disorder.

And like, I get goosebumps thinking about it, like, in such a different, in such a different way. Such a powerful movie. but Doctor 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 Bartonella could be a piece to the picture.

My advice would be you have to rule it out, and you have 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? Is like, you can be doing all the gut stuff, all the mitochondrial stuff, all the immune support, but if you're not actually addressing like one of the root cause or the root cause, you're just not going to make as much progress and you're just might plateau, right?

Or if you've seen good progress but you've plateaued, look, 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 of my biggest things, is like, you also have to make sure you're 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're anxious or we're upset about something, they pick up on that. And I've seen so many times when a mom is and a dad is feeling better, their child gets better, you know, without even doing many interventions with, with the child.

And so I just always like to, to kind of put that out there, that your health, your well-being and your, your mindset, they matter and they matter for your child.

And so we put everything into our children. But we also have to remember, like we have to fill our cup to and that will benefit everyone around us. So those are probably my biggest advice for parents.

And those are like so important and not things that, you know, that we talk about a lot and things that I think need to be heard because most parents are just running around, especially parents with children of special needs doing, you know, everything.

The whole focus is on the child. so and 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 from a neuropsychiatric disorder, you have to rule out Bartonella in particular.

And I also think, you know, you can then go down the lyme of looking for other infections like Babesia 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 lot of times people will say, oh, that's just growth. The pediatrician says it's just growth.

Treatment Impact, Parent Guidance, and Closing

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 stretch marks.

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

And there is a reason why a child manifests with autism and has this diagnosis. And as that 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 has widened.

So more children fit into that category. But you also have to think about these infections too. These infections are becoming smarter. And you're there's more exposure to them.

So as the the diagnosis has increased the numbers, so has I think the rate of infection as well. And so there's 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 they're not suffering from any tick borne disease. In particular Bartonella.

So have you. I'm going to try to choose my words carefully. So have you had a substantial number of cases where once you have as close to being sure as as you can, right.

Because you can never be 100% sure, but as close to shore as a complete eradication of the infections. Have you seen, have you seen children lose their diagnosis?

Yes, I have, you know, but again, it's it's can be complicated for children. And I think it depends on where you are in the journey a bit. What you've done, what else is there?

My thing is I think our kids are getting sicker by the day, to be honest. and so it's not just usually one infection, right? Like sometimes it's multiple infections and treatment is long and it requires a lot.

You know, it's not just how I go about treatment is with anti-microbial herbals. And we're talking like I treat for a year plus. Right. And so it does take a lot of, commitment and patience. Right.

And so it 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 got to make sure you're hitting all of it, like all aspects of that child in particular.

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

So it's usually a complex treatment plan that requires commitment and patience. But you see progress and like it's amazing the results that can come from it.

Yeah. It it's amazing. Okay. 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.lindseywellsnd.com.

And you can also find me over at Instagram @lindseywellsnd sorry at Instagram @lindseywellsnd, I talk a lot about, Bartonella as well as autism and PANS/PANDAS.

I love to post the research because I love to read about it. So if this information is interesting to you, I'd love to see you over on Instagram. Or if you want to work with me, you can find ways to do so on my website.

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 hope you have a great day and we'll see you soon.

Thank you.