Discover How Lyme Affects Your Endocrine System Transcript

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Introduction and Dr. Pattersonu2019s Background

Welcome to another edition of the Healing Lyme Summit. I'm Dr. Maria Hinchey, and today I am here with my very good friend and colleague, Dr. Jaquel Patterson.

She's here to help us learn how Lyme and chronic tick borne diseases affect our endocrine system and hormones. So welcome, Dr. Jaquel Patterson. Tell us a little bit about yourself.

Yeah. Thank you so much for having me, Dr. Hinchey. As you said, she is a friend and colleague and powerhouse in this this realm. And I am Dr. Jaquel.

I'm a nationally recognized naturopathic physician, a success coach and Amazon. Bestseller times three. I have my most recent book was on Women and Lyme my top contributor.

So I'm really excited today to talk about Lyme disease as it pertains to the endocrine system as well as for sex hormones and the adrenal system. Thank you.

So let's start out by just telling us in general, how does Lyme disease impact our endocrine system and lead to hormonal imbalance? Yeah. So I always like to say with.

Our hormones, there's or. With Lyme disease or any infection. And in general. With our full body, we have this what we call trifecta, which is like. The adrenal glands, the sex hormones, as well as the endocrine system.

And typically. If there is an issue with with. One, it'll impact. The other. And so the thyroid. System, as well as the adrenal glands, take a big hit due to Lyme.

Disease, particularly because for people that. Have chronic infections and chronic inflammation. So when you have chronic inflammation and you'll have this increase in something called the cytokines and this inflammation will affect the hypothalamus, which is where thyroid hormones are released, it'll affect your adrenal glands, which.

Is where.

How Lyme Affects the Endocrine System

Cortisol gets released and you kind of have this whole imbalance that could then have. This trickle effect. As well on your sex hormones like your estrogen and testosterone.

So the endocrine system, many of my patients that I work with, with Lyme disease, they often also have hyperthyroidism Or they have Hashimoto's. And that will definitely you'll see some worsening of symptoms if they also have that with Lyme disease and. Or.

It being Lyme disease being a precipitating factor. So are there specific symptoms that you would say of Lyme disease that are hormonally induced? Yes. So when you look at the endocrine system, there are a lot of studies that have shown that infections can actually.

Affect the thyroid. By way of impacting the conversion of. T4 to t3. And also the. Reversing of what's called reverse T3. So that will impact the way the thyroid is functioning and you'll start looking at more of like a hypothyroid state.

So symptoms of an individual with hypothyroid. Would be. Chronic fatigue, it would be weight gain, it might be hair loss, it could be brain fog. And it's tricky because, as you know, a lot of these symptoms.

Overlap with. Many of the symptoms women have when they have Lyme disease. And it also it. Correlates. To many of the symptoms women have. That are. Perimenopausal.

So you kind of have. This overlapping. Of symptoms that can cause confusion as to, you know, what. Is really going. On. And so it's really important that all.

Factors are looked at. When you are working up a patient, but definitely. More so related to you'll see issues with hypothyroidism. You'll also see there have been studies that show.

Borrelia proteins. Can also. Be a trigger for Things like Hashimoto's, which many people with hypothyroidism have. And then also any imbalance with. Cortisol, which.

Can also impact. The thyroid as well directly. So definitely in terms of symptoms, a lot of the symptoms that overlap with many of the symptoms we'll see with Lyme disease as well.

So are there certain tests or evaluations that you would use to try to tease out, you know, if this is just a symptom of Lyme or if this is a symptom that's being exacerbated by a hormonal imbalance, or if it's just truly a hormonal imbalance with a patient.

Yes. So you want to be. Sure to really check. You know, everything. So in terms of the thyroid, oftentimes in the standard. For health care, they're just.

Checking what's called TSH which is thyroid stimulating hormone, but they're not also checking. Free T3 a reversed T3, total T3 free T4. And also the antibodies.

Oftentimes people will get the antibodies missed. And so the antibodies you want to look at for Hashimoto's. Or for Graves disease are what's called. Thyroid globulin antibodies and thyroid peroxidase antibodies also known as like TPO.

And so that's important to look at. I'm also always looking at the sex hormone. so estradiol, I'll look at sex hormone binding globulin that can get impacted, especially if someone's having issues with like weight gain.

Like you'll see that oftentimes with Lyme disease, women will or men where they're having this like where they can't lose weight. I also see the reverse way.

Symptoms and Testing for Hormonal Imbalance

And it's really neat to see as. People get better, those. As they get better with Lyme disease, the things like wait, this up or down will. Actually start. Regulating.

So sex, hormone binding, globulin, testosterone, you may also want to check things like free testosterone progesterone. I will check for women FSH and LH.

I typically look between 18 to 21 and also I look at cortisol so you can check am cortisol or you can check PM cortisol. But oftentimes I will also do the urinary test to look for what's called estrogen metabolites, progesterone metabolites to see how.

You're actually Breaking down the hormones in your system. And I also might do a for point cortisol test as well, depending on the case. So if somebody is under a Lot of Stress, if I have women with like, say, thyroid medications, that.

That thyroid. Medication keeps changing, there's reasons for that with Lyme disease. Especially T3. Or. Reverse T3. Due to chronic infections. That is definitely like. A red. Flag.

Or if a person's. Hormones are low because when when they are. Low, that typically. Is indicative of chronic

infections as well. So all of those things, you just.

Need to look at that, that full picture. And that is definitely something I do. Really from the first visit, I typically will get. Information from somebody, but I also.

Will make sure to look at that early. On when. I first work. Up a case. Right. So obviously, balancing the hormones is going to improve how the patients feel overall. Right.

And get them feeling better. Can you talk to how balancing hormones would actually aid in the recovery process of healing Lyme disease? Do you think that it is linked?

Yes, 100%. I mean, I've actually seen women. So the biggest challenge I typically I'll say for for women and men, you'll see this change in testosterone.

Especially as we get older, over 40 years of age. But I've also seen men that have low testosterone in their in their twenties and some of the symptoms will be physical stamina, fatigue, etc..

And so what I'll find oftentimes as I get those hormones. Better, like up. To optimal. Numbers, their their ability. To manage their chronic infection, Lyme disease will often be.

Better, particularly if you're. In transitions, for example, a perimenopause or many menopause when those hormones go down. So when you think of things like estrogen, estrogen actually has a stimulating effect on immune function.

It helps with what's called the adaptive immunity. And testosterone has actually more of a suppressive effect. That's one of the reasons why they think, you know, women are more likely to have autoimmune conditions than men because of the testosterone However, you also.

See with men, when their testosterone gets. Lower, they'll start also. Having more significant symptoms with Lyme disease. So so that piece, getting those.

Two what's considered optimal. Numbers a lot of times are ranges are. Pretty broad. And when you work with an integrative. Provider will often look at what's optimal versus like, you know.

What's enough. So you want to look at what is. Optimal versus what's Enough. And so oftentimes when we get those numbers into. A good Ranges, I'll find.

That there is a decrease. In things like inflammation. Which thereby helps. To because all of the hormones help. To regulate. Our immune function. So having those hormones, endocrine system, your cortisol and Also your sex hormones more regulated.

You'll often see. Better. Management of the disease. So transitions of life will be important for women that are going through, that are menstruating.

You'll see changes. Like right before they get their period. Because all of those hormones drop down as well. Also, prostaglandins increases up, which helps with the shedding.

Of the uterus, which helps. Us have in our menstrual cycle. But it also increases up these something called interleukin six, which is an inflammatory marker.

And you'll see some of these like the symptoms that you have. Get worse, like right after right before your cycle. Begins. So a lot of times when I'm working a patient and getting those optimal.

You'll start seeing that they're not. Having as many. Flares that are. Occurring once both the endocrine system, the adrenal system as well, their sex hormones are more balanced.

It's really great information. So when we're talking about treatments, do any of the commonly used treatments for Lyme and or co-infections impact the hormone balance or endocrine system?

They can. I think one of the things I always tell people is to kind of. Look at different red flags. So, for. Example, two things when we look at the endocrine system and the adrenal gland.

So T3, which I mentioned, is the primary hormone. When you look at like synthroid the medication. They give you what's called T4, which helps to produce T3.

Now T3 is. Actually stimulating to the immune system, so it can actually help to control and regulate inflammation. But someone that you'll see that needs to keep increasing.

Up their thyroid. Hormone. So let's say you. Have hypothyroid. And you find that you need to keep going up, up, up and up with their medication.

How Hormone Balance Supports Lyme Recovery

That's a concern, that there's some infection brewing because your body is trying to basically help. To regulate. That inflammation. And T3, again, your thyroid is.

Like trying to kick in to control it. So that's always something that I always want to look at. The other thing is cortisol. So everyone always thinks of cortisol as a bad thing, but cortisol is actually a good thing.

That's your. Fight or flight. Response. I always say it's like you're running from a. Bear, your cortisol. Goes up. So in the immediate stage. Of of stress, your cortisol should go up.

The problem is with a lot of us, we're in this adrenal resistance where we've had chronic stress for a long time, and those high levels of cortisol. That were born of these actually start.

Going down. And cortisol. Actually helps to work as. What's called an anti-inflammatory. So cortisol is actually an anti-inflammatory just like you. See with steroids.

But what happens is when it's low. You actually allow for greater inflammation. So it's more it becomes more pro-inflammatory when your cortisol is low.

So those those hormones are really important to address if you have those disease conditions with Lyme disease. And vice versa, there's a reciprocal relationship.

Where you'll see someone getting Lyme disease and then all of a sudden eventually they start getting. Thyroid issues or you'll see they're had they have.

Hashimoto's. I have had patients with antibodies. For. Hashimoto's and the three hundreds or five hundreds. And when we work on Lyme disease, you'll see those antibody, that antibody can actually go down significantly.

Or their symptoms. Go on what's called remission. So and if you look at any autoimmune condition, most people have about two chronic infections that have autoimmune conditions.

So what you'll see is that balancing of working on things like Lyme disease and chronic infections, as those. Get better. Individuals that have these other disease conditions or medications, they may either either need less medication, they might be more in remission, they might be having less persistence of some of these chronic ailments that they have.

And so that's. Where. You want to re test re look at it and see if there's anything that's kind of kind of falling out from what's normal of. Your typical pattern as well.

Right. So I know this could be a super long answer, but as succinct as you could make it, what are some of your favorite treatments specifically geared towards, like the hormone balancing aspects of treating Lyme disease?

So whether they're pharmaceuticals or herbals or lifestyle approaches, you know, what would be, let's say your top three and we'll get more into that in the second half of this interview.

But just in summary, what would you say? Yeah, so I use I typically like things that are always. Going to support the cortisol. The adrenal glands, because I've had some people.

We support the adrenal. Glands and then the thyroid and everything and the hormones all come into effect. So one of my favorite ones is ashwagandha. So ashwagandha is what's considered a stress adaptogen and also helps to support the thyroid hormone.

And it also has supportive effects on testosterone. So we get three different things. We have help with our sex hormones. We have help with our thyroid.

Gland, and we. Also have help with our adrenal. Glands, depending on the person. One of the other things I love is tea tree. If it's a woman that's menstruating, which helps.

To regulate. What's called your FLC and LH. Which are. These. Precursors to estrogen. And progesterone. So they help to. To. Regulate a normal cycle 28.

To 30. Day cycle. So that's another one. And also things like so it depends on the person. Someone's perimenopausal. I might look at things like black cohosh, Nigella Sativa is another one I love and then I'm doing more than Dr.

Hinchey said. But squid. Ilaria bichell. Lenses is one of my favorite because we're not only helping with Lyme disease, but it also has a calming and relaxing effect.

So as we know, many of us are so stressed out that it kind of has a two for one. And so Skullcap is another one which the Latin name is. Called Skin Ilaria that I also. Love to use.

Yes, it's a wonderful, wonderful herb and one of my favorites. Okay, So we are rounding the end of our complimentary portion of the interview at the Healing Lyme summit.

And before I have Dr. Jaquel let you all know where you can find her, I'm just know that if you want to purchase these videos, you'll be able to get the second half of this interview where we're going to dive much deeper and talk about some of the things that Dr.

Jaquel thinks are the most important things regarding tick borne disease and balancing hormones.

Treatments for Adrenal and Hormone Support

So you can let us know where we can all find you and any important events that you have going on. Yes, definitely. So check out I made a website. For more targeted.

To women. And the reason being that in care, oftentimes women get diagnosed much later. It's we already know most people see 7 to 9 doctors before getting diagnosed.

But even later. Depending on the demographic. So I created a website called womenandlyme.com So definitely check that out. And also my book is on there Women and Lyme and also I have an academy so that folks can get more information and education as it pertains to just some of the stuff we're.

Talking about with a deeper. Dive and then also kind of a community. So one of the big and important pieces to me is that there's some sense of community.

So definitely check that out. Also, I have it on Instagram, Women in Lyme. And another thing please definitely be sure to check out is something called lymehealhers.com and that was born from really creating something.

Targeted towards issues related for. Women as well as children and families. And so we had a summit, but we will continue to have summits to provide free education from.

A plethora of. Experts and renowned. Speakers. In the field as it pertains to Lyme disease. So definitely check those both out. WomenandLyme.com as well as lymehealhers.com And if someone's interested in becoming a patient, you have your own private practice, correct? Yes.

So you can feel free to check out. My practice is Fairfield Family health and the websites for fairfieldfamilyhealth.com and we are in Connecticut I'm licensed in Connecticut, Massachusetts New Hampshire as well as Arizona.

We do tons of telemedicine, so we see patients throughout the country. So so definitely feel free to connect in there as well. We have all of our doctors at the practice.

Two are Lyme literate and. Trained. With all different slightly focus areas. Depending on, you know, our background and experience. Wonderful. Thank you so much.

Okay, so my next question, tell us how understanding this hormone Lyme interaction really impacts holistic treatment of Lyme disease? Well, it's important because I think in many of the we have.

First of all, there's. Lack of knowledge out there on Lyme disease by way. It's just medicine at large. And then we also now have experts like myself, like. Dr.

Hinchey, like. Everybody in the summit that have expertise in Lyme disease. But one of the things is that we don't we don't always talk. About how all the these factors, it's natural that the doctors, we really.

Learn to get to the root cause and the underlying cause of disease. So you really have to look at the. Person in in totality, the whole person. And so it's it's kind of it's at a loss to not look at how. Their.

Adrenal glands could be infecting their system, how. Their their thyroid hormone. How the endocrine system affects their system, how their sex hormones.

Oftentimes I'll see that will get missed because we're focusing too much on just these antimicrobials and getting rid of it, getting rid of it, getting rid of it, getting rid of it.

But why is it that one person will be fine after they do one round of antibiotics and they have no issues? And then you have other people, as you know, that have.

Struggled for. Ten or 20 years with Lyme disease. What's the difference? And so when that when you. Have to really look at like, what is that. Person's immune function, like.

What is their what we call their terrain. And what are the. Factors that are. Actually making it more problematic for them to to get to a healing, you know, to get to a full.

Healing state. Where they're in complete recovery from Lyme disease. And so you want to make. Sure. In your care that you're not only focusing on, you know, these these microbial so remove, but like how do we get that system at large stronger.

And I think in unfortunately, in the current day and age, we have these environmental. Factors, environmental. Medicine, which, you know, that's an area of focus for me like mold and.

Other other types of things or. You know, pollution. There's tons of things that cause. Our terrain, our. Immune

system to be blunted. Stress, as we know, is at a consistent.

High for people. And if we're not managing that, our cortisol, that's also going to downregulate. Our body's ability to. Have a good immune function or respond well to inflammation and then.

Thereby. Also have effect on our endocrine system, which helps. Our. Full metabolism. So I guess what I'm saying, like in summary is we want to make. Sure that all factors are looked.

At to really. Ensure that the person's. Immune system overall is at its strongest state so that you can actually combat things like Lyme disease and other tick borne diseases in a more effective and efficient way that. Is.

Really going towards recovery and management rather than kind of rather than continuing to only go down one path you want to. And there is this. This path that's a long term.

What are other things that have not been really looked at and uncovered? Right. And for an infection that infects every single cell in the body and therefore every single system in the body, you know, it's it's just so important to go in and evaluate every single system and make sure that they're functioning optimally so that overall, finally the immune system can recover and hold these infections in remission or completely get them out of the body.

Exactly. And we're talking our my. Talk here is only. Endocrine system and sex hormones. But there's so many other systems. We know Lyme disease impacts your cardiovascular system, your brain.

You know, obviously the the actual joints and structure. So there are. So many different pieces. And so that's why you just want to always make. Sure.

Whoever you're working with is taking a lens of looking at everything, especially when it's a disease that you've been impacted. For. For a long period of time.

Right? Yeah. Total Functional Medicine Naturopathic Madison approach. I'm so I cut you off when you were talking about some of your favorite treatments.

Would you like to elaborate on that? Oh, definitely. So for some some people or some also we have a.

Resources, Practice Info, and Final Advice

Prescribers to in the. Office and some people do actually need to be on a bioidentical hormone. So I did want to mention that is sometimes a way to help people transition, not.

Typically for too. Long of a time. I mean a lot of the studies. Are about two or three years. I know definitely people are on hormones much longer than that.

But I do find for some some individuals that may help them the most by way of testosterone or mix of estradiol or. Estriol. Rather, and progesterone. So some people may need that. However, I.

Will say there have been many patients we've been able to not have to go down that route when we focus on making. Sure that there there's good like. Estrogen clearance or hormones or clearing well.

Making sure that. They're there, microbiome, their their terrain is good and making sure their adrenal glands are supported. But that is one thing that someone may need to look at if those things are not.

Are too severe, you know, if there's. Too great of a severity, I do like it. So one of the other things I definitely look at is depending on I definitely run cortisol testing pretty frequently.

So if somebody is higher in. Cortisol, higher levels of cortisol. We'll look at things like Magnolia, which is an. Herb. If someone is low in cortisol, I might look at.

Cortisol. Fractions for a period of time. Also. I look at higher adrenal support. Especially things like cortex fractions, if somebody is on steroids.

So if somebody has been on steroids. For a period. Of time, that might look to be something that I support them up with as well as like B vitamins B five, B.

Six, B 12. Those are all co factors. Zinc ion ion is another thing to look at. That all help to support the. Thyroid hormone, but also the adrenal glands.

So sometimes you'll see a deficit in that. So I'll look at supporting that, especially what I mentioned. Cortex fractions. If someone is on steroids as they.

They get off of it because you'll see people will flare. Oftentimes with Lyme disease when they they get off of it. So those those are some of the things I look at.

Look at one of my other. Favorite for the brains. That brain support. Are the. Phosphatidylcholine phosphatidylserine that will often help individuals with increasing those.

The not only helping. To regulate cortisol. But also helping with quality of sleep, because sleep often tends to be a problem. It's also. Supportive for like brain.

Fog memory as well as ginko and some of the antimicrobials. I love Artemisia, Japanese knotweed, and then also I just wanted to mention stevia. Stevia is a good one to look at because oftentimes not only has it been heavily studied to be effective for its impact on Lyme disease.

But it. Also has been studied for insulin and glucose, etc. And oftentimes. People with cortisol dysregulation. May have an Issue with. Their their insulin, basically.

Their Balancing of that as well. So I could go into so many. And that's one of the tricky things, as you know, as a naturopathic doctor. Or anybody in the functional medicine space.

Is it really is. Specific to the person. And where their numbers are by. Way of lab test. And this way you. Can be very specific. In what treatment you recommend. But those are are herbs.

I commonly look at and prescribe. For people outside of just. Like the general antimicrobials for Lyme disease. I was focusing more on adrenal and endocrine system.

Wonderful. Um, so if there were one or two things that you really wanted to get across to our patients here in our audience, what would it be? What advice would you give us?

I think one thing to always to continue having hope, because I think that's one thing I see that people go down the rabbit hole of like everything that possibly could be wrong.

And I know it's hard because especially when you've suffered from it and often people that have Lyme disease, I also had Lyme disease, I had babesia and Bartonella.

It oftentimes is a thing that happens fast and there's really instances of trauma related. To it because you're. Like, Is this going to happen again? How many of my patients.

We have to talk through that they feel better. And then there's this anxiety of is this going to come back again or when is this going to recur? So you just have to be careful.

Getting you too much information, because all that information may not always necessarily apply to You. And I really encourage you to. Try to not self-treat and really working with somebody that.

Is a really. Good fit and match for you and has the experience based on the actual health, you know, the symptoms that your prevent your presenting with.

But just definitely. Realize that your body is resilient. Your body has the. Ability to to, to great you know, to be stronger. To be. Able to to rebound.

And I think with a lot of people in the world with Lyme disease. There's a lot of there's a lot of fear of will this be forever? Will this come back? How am I going to respond to. It or just.

Again, going down that rabbit hole of getting so much information that it could. Be really discouraging So make sure you're. Surrounded or connecting in with the community.

That's that's going to be supportive. And then you're also working with a person who's adept at kind of walking you through that journey and is also doing so.

Positively as well. Yeah, I think mindset is everything. You know, I find it very difficult for patients to get better when they have been dismissed and told it was all in their head and they really think that they're broken and they can't get better.

So having a positive attitude and having that hope and belief that they're going to get better is is so important with all of this, even in the ability to, like, regulate, you know, our stress levels and balance our adrenals and our hormones and all of that.

You know, if we're in this constant fight, fight, flight or freeze, it makes it really, really hard to get better. So thank you so much for your time.

Thank you for joining us. And please once again, let all of our listeners know where they can find you. Yes. Thank you so much for having me again. So checking out a womenandlyme.com sign up there.

Also find me on Instagram @womenandlyme My most active Instagram account, though, is @naturopathic.physician And then also, if you're interested in coming to.

Our practice. And learning more about our practice specifically, definitely check out. FairfieldFamilyHealth.com So thanks again so much for having me.

Thank you. And thank you everyone for joining us and I'll see you at our next episode. Bye bye.