Protect Your Family from Ticks: Regional Risks, Prevention Strategies, And Myths Debunked Transcript

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Introduction to Tick Prevention and Lyme Risks

Hi, and welcome to another episode of the Healing Lime 2.0 summit. Today we're going to be talking about protecting your family from ticks and tick borne disease.

Specifically, we're going to talk about regional risks prevention tips. And we're also going to dispel some common myths related to Lyme and co-infections.

Here with us to navigate through all of this is my very good friend and colleague, Doctor Alexis Chesney. Doctor Chesney is a natural Catholic physician, acupuncturist, and author, as well as an educator specializing in Lyme and vector borne disease.

Doctor Chesney thoroughly enjoys getting to the root cause of complex chronic illnesses, and partnering with her patients to find wellness and balance in their lives.

Welcome, Doctor Chesney, tell our listeners a little bit more about yourself and how you came to specialize in treating vector borne diseases. Thank you so much for having me, doctor.

It's great to be here. I love talking about prevention preventing Lyme in the first place. I'm very passionate about that. You know, I think it all really goes back to, my grandmother.

You know, I often talk about how a friend of mine in medical school had, Lyme. And that is true, that, that was a difficult journey. But really growing up with my grandmother who had, strep as an eight year old before penicillin and sort of like the classic pandas, right?

Had rheumatoid arthritis and aches and pains and fatigue and lots of medications. When I got to know her and, she was so dear to me, I always thought, you know what else can be done for her?

I always wonder, you know what?

Dr. Chesneyu2019s Background and Path to Lyme Care

If there was a natural path or an herbalist who could have helped her when she was eight years old? You know. Luckily, she had a valve replacement. So that got her a few more years.

Which was wonderful. But, Yeah, it's kind of interesting thinking about strep or Lyme or other pathogens and how this can create, such long term chronic issues for patients.

And I think that's what my calling is really to kind of guide those patients, on their journeys of healing. Awesome. Thank you for sharing that. So tell us how how did you become, specifically invested in treating Lyme and vector borne disease?

So we know, you know, with your grandmother and all of the, you know, with the strap issues and how they can lead to various immune dysfunction. But like, how did you actually settle into treating Lyme?

Yeah. Well, I was very, very lucky to, stumble across Doctor Richard Horowitz. And, he wasn't too far from. I did an internship. And then, that was during my residency in southern Vermont.

And so he said, oh, there's lots of Lyme in Vermont. And I thought, well, there probably is some, you know, but

coming from New York and Connecticut, I certainly knew there was a lot in those areas.

And I really had no idea that I was on the front line of line in Upper New England. And so, yeah, that's what happened. I thought I was going to be doing primary care, and really it turned into just seeing patient after patient of undiagnosed, misdiagnosed Lyme.

You know, people said there aren't even any ticks in Vermont. Oh my God. You know, and so steroids. Someone would walk in with a tick by and have no idea what to do.

And clearly there were ticks and, you know, the incidence for Lyme has been highest in those states, you know, since 2010. So. Yeah. And also, you know, for listeners that don't necessarily know what naturopathy medicine is like when we are trained in school, we're really trained to get to the root or underlying cause of someone's illness.

You know, I think a lot of people think that naturopathic doctors just use, you know, herbs or supplements or natural medicines as opposed to prescriptions.

But I think it's the whole like philosophy, like the functional medicine piece of actually figuring out what is happening in that patient and directing the treatment there.

And, you know, often times it is, you know, a vector borne disease or some sort of stealth infection that has never been properly diagnosed. Absolutely.

I saw that all the time. And, you know, these diagnoses like chronic fatigue syndrome and fibromyalgia, it's like we want to get to what is causing this.

There's a cause for this. Right. Yeah. Okay. So diving more into the prevention. So obviously tick identification and knowing what the various tick populations can carry, is very important in the scheme of prevention.

So can you tell us a little bit about the different tick populations and the diseases that they carry across different regions. Yes I think this is super important because then we know, if someone had a tick bite and if we can identify which tick it is, then we know what pathogens that tick might be carrying and therefore what diseases might manifest.

And so, of course, you know, we are New England. We're used to the blacklegged tick, the deer tick, which carries Lyme or can carry Lyme, right, which is Borrelia burgdorferi, or out in, north central states.

That would be beryllium. And I as well can be a cause of Lyme disease. But Bézier and a plasma Poisson, beryllium.

Tick Species and Regional Disease Risks

So that is commonly what's discussed because, so much of these diseases occur in the northeast, but we do actually have Lone Star ticks that have made their way up, into New York and Connecticut.

And now even we're seeing them in northern New England. And it's really important to note that they carry a batch of different pathogens. Right. And so the Lone Star tick can carry or liquid.

And something that causes starry southern tick associated rash illness, which is a little mysterious. We won't go into it, but it's thought of to be a Borrelia species, which would be a Lyme like causing species of, pathogen.

But there's no a 100% consensus on this, which is kind of crazy. I hope that we can really get there so we know what that is. And also, you know, I think more people are getting to hear about, alpha gal syndrome, and that is transmitted by the saliva in the Lone Star tick.

So it's not a pathogen, but it's it's, Well, I'm sure other people will be talking about that, which is really important.

But so a whole different host of illnesses that you can acquire from a Lone Star.

Tick. And then out west, we have the Rocky Mountain wood tick, which of course carries Rocky Mountain spotted fever. Down south, we also have the Gulf Coast tick, which can carry a Rickettsia species.

And then the western blacklegged tick out west is very similar to our blacklegged tick, which carries similar species. But, you know, I think it's important when you travel.

Also, there are these soft ticks worn off of Durrells. They carry Borrelia species like Borrelia, Herm C or to a cat. And those attach to you the ticks attach to at night, overnight.

And they can transmit those infections in 15 seconds. So this is usually when you're outdoors in like an old cabin. Or if you're somebody who who explores caves and you're really in the outdoors, but, in southern United States and a little bit of western United States, we find these ticks.

And I think this is really important to know about them and what they carry as well. So yeah, so and I think to all the ticks. Yeah. And no matter what it is just so important to get your tick tested right.

Save the tick. Send it out to a reputable company and actually have the tick tested so that you know what type of tick it is. And also so you know what pathogens you could have possibly contracted from it.

And then you can, you know, take appropriate preventative measures to stop yourself from hopefully getting the infection. Now you brought up a good point, right?

So if anyone goes to Doctor Google, right, and looks up how long it takes to transmit any of these infections, most places are going to say that you only have to worry if the tick has been attached for 24 hours or more.

And this is such misleading and false information. Can you elaborate a little bit more about how quickly various ticks can transmit the various infections?

Because I know it's different for many of them. Right, right. So we talked about that scary 15 seconds for, Borrelia species and that's, species that cause tick borne relapsing fever from those soft ticks.

The owners of Dora's, the very special that, you know, you don't come across those overnight. We might say. Right. But important to know about so going back to something more common, like the black legged deer tick in the northeast or out west, but so those, you know, of course, with Lyme, the, the main pathogen of concern, there there's sort of a bell curve. Right?

So it was identified that there was transmission as little as four hours. Now, that doesn't usually happen, but I think it's important to acknowledge that it has. Right.

So usually they're seeing more like 12 or 24 hours for transmission. And yes, sometimes it can take even longer for transmission to happen. So we've got that bell curve.

I just think it's important to be aware of that. And also about 10% of the ticks that are out there have already started feeding. And when a partially fed tick attaches to another human and is sort of primed.

Right. So they've they've started that blood meal, process of feeding. Now time has gone by where the pathogens may have already moved into the saliva.

And so when that that's, that's what needs to happen for transmission to occur, moving those, pathogens in the saliva into the human.

How Fast Tick-Borne Infections Can Spread

And so about 10% of those ticks are going to transmit, Lyme within 24 hours. So I'm saying that's wrong. So 10% of the ticks out there are our cohort that I'm talking about, right?

80 to 100% of them will have transmitted Lyme within 24 hours. So I think that's super important to understand as well. Right. Just how quickly this can happen. Yeah.

And to further explain to the listeners. So like basically the SPI rickets, which are the type of bacteria that cause Lyme, they live in what's called the hind gut.

And so when the tick starts feeding and starts taking in a blood meal from whatever, it's a human or a mouse or whatever, that blood meal coming in mobilizes the spiral, leads to the salivary glands.

And that's the part that can take several hours. So like if the tick has been feeding on a mouse for, let's say, you know, 20 hours and then the mouse scratches it off and then the tick crawls over and gets on to you.

You know, it already will have had the spi rickets mobilized to the salivary glands. And then when it attaches to you, when it bites you. So transmission can happen very rapidly because the pathogens are already there in the saliva.

And so it's kind of like, you know, that 24 hour period that could have happened on a different animal, like the mouse, for example. Sure. Absolutely.

But go ahead because. Right, the Poisson virus is very quick and go through some of the. Yeah. Yeah. So, a plasma takes 12 hours. I think that's important.

We see a lot of venom plasma in the northeast and, possums very quick. So that's 15 minutes. So that's scary. Thank goodness. It's pretty rare. But in some areas I mean, there was, the study out in, Massachusetts showing that, small area had like 70% or more of those ticks had possums.

So there are and there was a similar area in Pennsylvania. So there are these kind of like pockets of areas where blacklegged ticks actually have a higher infection rate of possum.

Yeah. So what are the most effective strategies, in your opinion, that people can take to protect themselves and their families from even getting a tick bite in the first place, especially if they live in, a high risk area?

Yeah. So I always like to engage my patients and seeing where they're at. Right. Because I have some patients that really don't do much at all and some who are doing all of it. Right.

And so meeting them where they're at, you know, if you're not doing tick checks, please, please start doing tick checks, you know, and really spend some time spend time in those hard to find places, those moist, dark, warm areas, because those are the areas that the ticks like to go to.

But a lot of us are doing that already, right? So let's take it a step further. I really recommend using permethrin treatment for shoes and socks, because just doing that will decrease the chances of a tick bite by 73 times.

So that's pretty remarkable. If you want to go beyond that, you can certainly think about doing clothing. And, you know, materials like you can do a blanket if you do want to do a picnic or if you're somebody who's really working out, outdoors and have some backpacks or tents or materials that are please, you know, spray those down with permethrin.

Now, just to know, please be careful when permethrin is wet. It is toxic to our skin. Once it is dried, it is very well. Bound into the material, and will not harm us.

Best Practices for Tick Bite Prevention

So. And it will continue to, reflect. They will continue to, repel ticks. So, I'm really, like, utilizing that permethrin, on

some workers in North Carolina.

It was actually shown that it decreased the chances of a tick bite by 99% when the workers that were, you know, in, permethrin treated clothing. So I work with a lot of loggers and farmers and people that are just outdoors all the time.

So also, I think it's important to match your level of, you know, being outdoors and with with what we're, we're using. You know, we do want to acknowledge that just walking across your front lawn, there may be a tick there, even if you keep the lawn short, which is helpful, but it's not going to deter ticks 100%.

So doing the socks and shoes I think for like an everyday person, is a great first step. But if you're a gardener, you know, and you're kneeling in the garden, you may want to do the pants, the shirt, and have, you know, I always had, you know, set of clothing that was like my gardening clothes, that I had sent out.

And you can send out clothes to a place called Insect Shield, which is really awesome. So you can do certain things yourself if you do it yourself. You need to retreat every six weeks.

If you send it out to a place like Insect Shield and they commercially treat your clothing, it lasts 70 washes. So a long time. So combination of these things and then of course the repellents that are safe for our skin.

I love cedar side using cedar essential oil. But then we need to remember to apply. So reapply very often. So every 1 to 2 hours. That's the efficacy.

There's de there's picaridin a lot of options I think using a combination of the permethrin treated clothing with some repellents, with tick checks and then also putting your clothes into the dryer for five minutes after you come in from the outdoors.

I think all these things in combination can be really, really useful. Yeah, I think for the effectiveness even of each, you know, if each of those individually, if you combine them all together and then do tick tocks, I mean, you, you, you can do a really good job of decreasing, your risk of, of exposure or being able to find it immediately and deal with it.

I have one question. So this always pops into my head. So I would imagine it's popped into at least a few of our listeners. So like if you have the socks that are treated and let's say you treat them yourself and then your body starts to sweats or your feet starts to sweat, there's no risk of that being then absorbed through the skin.

Or do you recommend or do you personally put another pair of socks, like in between those socks and the skin? Just curious. Yeah. Well, apparently it's very tightly bound with the material, so it needs agitation to be released.

So something like the washing machine. Yes. When you put into the washing machine it will be released to some degree. But but knocking through onto you're getting rained on or sweat, you know, is not supposed to be able to release that on to us.

Okay. All right. Great. So staying in the mode of prevention, we had a study that was done several years ago showing that a single dose of Doxy Cycling can prevent Lyme disease and other tick borne illnesses.

Can you comment as to why that is not true? And typically is not enough after a tick bite to prevent any of these infections? Yeah. So, I mean, I would say for my patients, if they really want to take a dose of doxy, they certainly can't.

But I'm going to talk about a lot beyond that. So Eli, Eli, these guidelines recommend 20 Days of Doxy. And I talk a lot about using herbal medicine. When we're in that stage of watching for symptoms, when somebody is asymptomatic, before any symptoms might come up.

But yes, this is what often is given or recommended to patients when they see a conventional medical provider, the

doxy cycle and single dose. And so this, this, this study is just it's really flawed, unfortunately.

You know, it would be great. Like, I remember years ago when I finally dug out the study and read and I thought, oh, this is so disappointing. This would be awesome, right?

It was this easy. So, so yeah. So different things like it only showed that 87% of the Lyme rash, erythema, migraines, resolved with the single dose doxy.

So a few things, right? The rash is always going to resolve. And that it didn't resolve in all the cases is kind of awful. Yeah. Right. It was kind of surprising.

They also did not although they tracked it. It's really interesting. I'll note, febrile illness, you know, fever, certain symptoms some people did have even after taking a single dose of doxy.

But it wasn't it wasn't measured. It wasn't, discussed. It was, it sort of was dismissed. And, and so I wonder about, you know, the criteria for what they were looking for.

It should have also included the symptoms that we know can happen. That can happen without that or, you know, migrants. Right. Like the fever, the chills, the, new joint or muscle pain, etc..

And so it wasn't looking at all that and the length of time, that observation period that they had, you know, may not have been long enough, even if they were documenting those symptoms appropriately, it may not have been long enough to catch them and then also document and report on and evaluate that.

And then just to say, I don't think they were, you know, considering co-infections, obviously, but it's important to consider co-infections. Right. Now Doxy can, you know, treat or Loukia and Rocky Mountain spotted fever and a plasma.

Why Single-Dose Doxycycline Is Not Enough

So it it you know, it may be in this, question of, okay, so if we're evaluating a single dose of doxy for Lyme, then we should be looking at these pathogens.

However, it's really important to note that Doxy Cycling does not treat Berbizier. Right. So this is carried by a black legged tick. So so a single dose doxy.

You know, if you were to take that and if it were to work, it's not going to get to them anyway. So what do those people do. And any of the viruses like Powassan virus or heartland virus etc..

Right. And even though Doxy is effective against are lucky in a plasma Borelli one dose of it certainly is not suffice. So it's even though it might be the right medication for most of these infections, with the exception of viruses and parasites like the bco, a single dose of an antibiotic generally is not enough to properly treat any sort of, infection.

And then when it comes to the study two, I think interestingly now, it's not like I looked at it right before coming on here. It's been several months.

And Alexis, correct me if I'm wrong, but I think like the diagnostic criteria was actually the development of any, rash. And we know that that happens only with Borrelia, and it happens less than 40 to 20% of the time when someone has Lyme.

So those numbers are pretty dismal. And I think they only followed patients for roughly like a month. And it can take 3 to 30 days for that rash to develop in the 20 to 40% of people that it develops in.

So and also, I think there was a very low number of participants in the study too. So there were just so many, so many things that were wrong with that study.

And it's it's just crazy to me that so many medical professionals like just cling to it, probably without ever even reading it or, you know, evaluating it, but.

Right, right. Yeah. Just so important if you are, you know, seeing someone and you've had a tick bite not to to accept this as your treatment. And again, get the tick tested and know what you're dealing with.

And then IRBs are wonderful as far as you know, preventing from an anti microbial, perspective as well as the immune modulating and inflammatory angles, that are important to address when you're dealing with an acute infection.

Absolutely. Okay. So if someone in your family and we've kind of danced around this, but if someone in your family or you were bitten by a tick, lay out the steps for us.

What is the action you would take immediately and why? Yeah. So first remove the tick and as soon as possible. I love my own home. Tick. Twister. I think they work the best.

I've mutilated many ticks early on, using those tweezers. So, that's my method. And then save the tick, right? Find a little baggie or piece of tape or something.

As soon as you can, just to keep it from crawling away. And then first-aid. Right. So I use Andrew graphs on tick bites. If you don't have that, you can certainly use, you know, at least some peroxide or alcohol.

You can use the deer tick bite formula, something that has some kind of antiseptic or antibacterial, more so targeted to Lyme, like Andrew Griffiths or the deer tick bite formula.

Then we're going to, note any symptoms, you know, watch for symptoms, for the next 30 days and then start, the deer tick bite formula, if you'd like. So I created that formula, based on work by Steven Buettner.

I know you know very well. And so it has Japanese knotweed. Who? Tuna, cat's claw and crypto Lepus. So these are the herbs that I chose based on their efficacy against that which can be carried by a black legged deer tick.

Some of those pathogens goes after Lyme and then a plasma, but a possum. And so, starting that, you know, can be really effective. You take a teaspoon three times a day for 30 days.

And this way we're not only, you know, killing any pathogens that may have been transmitted, but as you mentioned, you know, there are anti-inflammatory effects, there's immune modulation.

It's actually helping your immune system to work better in the face of any of these tick borne diseases. Right. So, yeah. So as you're doing that, looking out and reporting any new rash around the tick bite, any new symptoms, fever, flu like symptoms, chills, sweats, new joint or muscle pains, new headaches, anything new?

Of course, whenever. So you're a medical provider at that point? Yeah. So then yeah. Yeah, I think, and then, you know, if symptoms were to develop, then we're moving into thinking about okay now or into a symptomatic tick bite and what is the pathogen and how can we best, evaluate that?

Is testing appropriate at this point? You know, if Lyme testing is not accurate until four weeks later? But and a plasma testing is. Right. So going through that, critical thinking with your medical provider to determine what the best, set of action is.

Yeah, absolutely. And I think for a Lyme literate provider, you know, even though you have to wait the 3 to 4 weeks for accurate antibody production, towards Borrelia, for example, you know, we can look at shifts in white blood cells and, and, you know, the differential of the different types of white blood cells.

And we can look at inflammatory markers. There's a lot of things that can be evaluated.

What to Do Immediately After a Tick Bite

You know, early on, that isn't relying on the indirect testing, you know, of antibodies. And I also just want to point out to, you know, there is a lot of neuropsychiatric symptoms, especially in kids.

So most of the time we're looking for these physical, musculoskeletal or pain syndromes to come on. And I just think it's so important and you know, for adults as well as children, but if you see a change in somebodies disposition or their attitude or anxiety out of nowhere or someone who just starts having panic attacks like that's not normal, you know, true mental illness, if that's what we want to call it, usually doesn't just come on overnight.

So super important to really be on the lookout for any abrupt change, not just a lot of like, these physical and systemic sort of symptoms, especially in kids.

I agree, I definitely see that in children a lot. You know, behavioral changes, personality changes. Missing developmental benchmarks. Yeah. Yeah. So, Alexis, you developed this preventing line and tick borne diseases online course.

What inspired this. And tell us tell everyone listening about this program that you've created. Yeah. Well, I'm so passionate about prevention and education.

And so my book came out preventing Lyme and other tick borne diseases. Few years ago. And I really wanted to update that and really delve into, information even deeper, through the course and provide that for both, you know, patients, laypeople as well as medical providers.

You know, I have over 200 journal article references that, you know, I really wanted to kind of bulk up the science behind it, you know, bring in all the evidence and have that for those who are interested.

You know, some of my patients are really interested in that. So so whether you're, interested in that piece or if you just want to be able to learn more about prevention, signs and symptoms of all the tick borne diseases all over the world, I actually I brought it globally, because I was focused on North America for the book.

I really wanted to go beyond those boundaries. And, you know, patients in Europe. And I was just thinking about, well, gosh, you know, it's gotten me to learn, well, what ticks are there.

And one of those carrying and so really being able to provide that information for people all over the world. So yeah. And I think it's pretty accessible, you know, I speak in a way and you get PDFs of all the information.

So you can really look at it over and over again if you wanted to, to be able to understand whatever parts of this that you want to. So, yeah. So it's prevention signs and symptoms and then treatment.

So acute treatment. And then for the medical provider, there's a section also on some, critical thinking, you know, thinking through these acute cases going into chronic just a little bit.

But, you know, most of the patients I see do have chronic illness. A lot of us are, dealing with chronic illness. And this kind of really focuses in because I think there's there's not enough out there about, well, how do we really thoroughly treat acute illness?

Because if we can do that, you know, if we're lucky enough to find that tick bite and, if we had symptoms, unfortunately, if we can really treat this thoroughly right up front, that was really my goal.

So people can bring this information to their medical providers. Yeah. So it's about six hours of, of information and you can go at your own speed, start and stop. It's all online.

Self-study. Self-paced. Yeah. Yeah, I hope I can make a difference in people's lives. Yeah, I'm sure that it. Well, and, you know, for everyone listening, going like, well, I already have chronic tick borne disease, so how is this

going to help me?

The chances of getting beat again are pretty high, you know, especially if you haven't really changed all of the risk factors, right? That that got you beat in the first place.

And unfortunately, there probably, you know, a loved one that you could help prevent getting this too. You know, if you know how to do the prevention, I can't tell you how many patients we patients we have treated to completion where they're in remission, all of their symptoms are gone.

And then we get that call, sometimes within weeks or months of the patient getting better again. And it's devastating. Yeah, that that's what got me into writing the book in the first place.

I just had a handout that, you know, got longer. Long. Yeah. Because, patients come back like they were living their lives feeling good, thriving.

Preventing Lyme Through Education and Support

And then they got another tick by it. And it is it's like, so discouraging. But, you know, we have a lot of resources and, we want to get all that information out to people so that that doesn't happen.

Or if it happens, they get on treatment right away, you know, and the right treatment. So how can our listeners, find your program? Yeah. So if you go to my website, that's a great place to start.

So that's Dr. Alexis chesney.com doctors and doctor. So Dr. Alexis chesney.com. And you'll find it preventing and treating Lyme and tick borne disease.

And if somebody wanted to work with you are you taking new patients. I am at my private office. We have openings so you can find that on the website as well and schedule there.

Okay. Wonderful. Well, before we wrap up, any, you know, any final words of advice for our listeners? Well, I think, you know, so, so many of my patients, can struggle with chronic disease and it takes it takes a lot to, to get through it.

So I think being gentle on yourself is so important, you know, self-care is huge. And creating that team of medical providers as well as your team at home, you know, whether it's family or friends or spiritual community, whatever that might be for you.

I think it's it's really, you know, people with Lyme and tick borne disease need each other and need support to get through this. So I encourage you not to isolate.

I see that sometimes. And I think through Covid, Covid, that's gotten worse. You know, this epidemic of loneliness. And I think that can contribute to the challenges of actually being able to heal, you know?

So, hopefully, you know, people can feel connected through this summit and get some resources and, you know, their support groups out there as well, whether that's online or in person.

There are so many amazing organizations doing amazing work out there. So, I'm sure people will learn all about that through the summit. So thank you so much for doing what you do.

I'm really glad that this is possible. Well thank you. Yes. And I think having the support and having the community is it's crucial. It's crucial in being able to to heal.

Thank you so much, Alexis, for being here with me today and sharing all of your immense amount of knowledge with everybody. To our listeners, please go to Doctor Chesney's website and look up her online course.

And I hope that everything that we have shared with you today helps you on your journey to healing Lyme. We'll see you next time. Thanks, Alexis. Thank you so much, Marina. Take care. You too.