Introduction and Speaker Background

Hello, everyone. My name is Dr. Richard Horowitz, and I'm co-host of the Healing Lyme Summit. I'm here today with my other co-host, Myriah Hinchey. And, Myriah, I'm so happy to have you here today.

Today's topic is going to be what not to do when you remove a tick. And I want to be thanking you tremendously for all the 17 years of work you've done in this field.

Because living in Connecticut, we're certainly in the middle of an epidemic. And I want to thank you for all the work you've put into this. Let me just read a quick bio for you.

Dr. Myriah Hinchey is a Connecticut based licensed naturopathic physician, fellow of the Medical Academy of Pediatric Special Needs, or MAPS, and she specializes in the treatment of vector borne diseases with over 17 years of experience.

She has treated thousands of patients facing chronic tick borne diseases, gaining invaluable insights into the complexities associated with these conditions.

So thank you. Why don't you tell the audience a little bit about yourself and how you got into this? All right. Well hi, everyone. good to see you. Good to see you, Dr. Horowitz And again, honored to be co-hosting this event with you.

well, you know, I'm a naturopathic doctor who was trained to find the underlying cause, and I practice here in Connecticut. you know, naturopathic medicine in my area.

I'm in a very rural part of Connecticut, and it's not something that most people, you know, just seek out. I'm kind of one of those doctors that, it's like a last resort.

You know, they've been to a bazillion other doctors. No one else can figure out what's wrong. So go see Dr. Hinchey, because you know, I have kind of.

Well, I had the reputation for being able to figure out what was going on with people. So long. Long story short, it's almost impossible to be a doctor that focuses on and finds the underlying root cause.

if you if you don't know about tick borne diseases and vector borne diseases. So, I never wanted to specialize in treating this. and I, you know, I joke and say that I was forced to and, you know, to make things even more serendipitous or whatever, you know, I ended up with all of these things myself, and thank God I did, because if I wasn't already Lyme literate, I don't know where I would have ended up.

So in a very long term, of course, of events, I now specialize solely in treating complex chronic illness vector borne diseases, for both adults and children.

Now that's great. And by the way, for those of you who don't know about naturopathic physicians, the real role that naturopaths play, at least from what I've seen in working with them, is that they really understand the terrain of the body and the underlying biochemistry of how things work.

it's not just a question of naming a disease and throwing drugs at it, which is sometimes what doctors do in medicine. The real role of the naturopath is to really look at the body, mind, spirit, emotions, like all of the factors underlying biochemical processes and the terrain of the body, how the body responds.

So, I'm glad you're there and available for people in Connecticut. and that you've had this much experience. So, great. So let's dive in. What should you do if you get bit by a tick?

So I'm going to give you some multiple choice questions of. Oh no, you need to know. What the. Question. So if you get bit by a tick answer the following questions A you should run around your living room screaming.

Oh my God. I got bit by a tick B I don't know what to do. I'm thinking put vaseline, gasoline or a match on it to be able to remove the tick, which unfortunately some people do see harm my health care provider immediately for advice or d do nothing because oh, the ticks are benign.

They don't really carry anything important. Which of the following would you say someone should be doing? why isn't there a none of the above answer? Yes. No, none of the above would be the right answer.

Although call your health care practitioner is certainly something you should be doing. Yes, so. I thought that one ended up with the demanding the IV antibiotics.

Sorry. Yeah. No it's quite it's quite clear. So. So tell everyone how obviously we're all getting tick bites, right? I mean, we're all living at this point in an epidemic of tick borne diseases.

What Not to Do After a Tick Bite

Tell people how do you properly remove the tick? What's the first thing you should be doing? Okay, so in all seriousness, the first thing that you should not do is put anything on the tick to agitate it or to suffocate it, or anything you can dream up to encourage it to pull its head out itself.

So what happens is, is most of these microbes are actually in the salivary glands of the tick. And when a tick naturally withdraws its head by itself, it actually regurgitates its contents into the host.

Or you, you know, the person who has the tick bite. so we definitely don't want to do anything like that. What you want to do is you want to get a pair of fine tip tweezers, or flat tips, and you want to go down as close to the skin is absolutely possible, and you want to firmly grab on to, like, the neck.

Or if you can reach the head if it's not completely buried in there, that head of the tick. But basically you want to get as far down on the tick as possible, and then you want to pull with a steady force and see how my skin is kind of tenting up.

You'll actually see this, and you just want to hold steady pressure. And I tell my patients, start counting. Usually somewhere between when you get to 60 and maybe like 120, the tick will just let go.

You don't want to flip it over. You don't want to twirl it. You just want to pull straight with steady force until the tick lets go. Then it's important to clean the area.

either soap and water. You can use rubbing alcohol, you can use hydrogen peroxide, but you want to clean the area. And then I typically we'll have patients make up a, a bentonite clay and, and a mixture I like.

And a graph is because it's directly anti spiral kettle. and then put that on there and this will have like some drawing action. If you don't have bentonite clay you could do baking soda and just try to draw back up any of those saliva containing the microbes that you can.

I then instruct patients to put and or this if they have it soaked in a cotton ball with either a aid or tape on top of the bite, and change that regularly because the antimicrobial actions, you know, you can get some of that transdermal, penetration.

Also you could use like, you know, a triple antibiotic ointment or anything that you can find, you know, to put on the bite to try to have some sort of transdermal, saturation.

So then beyond that, you should take your tech. Don't do anything to it. Just put it in a plastic bag, a lock. And then I advise going to tech report.com.

So to me they have been the most reliable and they have the quickest turnaround time. And they test for the most pathogens. They have various panels. I suggest that you go all out and do the $200 panel that tests for all of the different microbes, and that way you know what you are dealing with, because if you end up symptomatic and we're going to get into this, there's such an overlap of symptoms in the various microbes, you know, between like babesia, the a Bartonella and a plasma even plus and virus and Lyme disease.

They all have very similar symptoms. And really they're not all treated with the same pharmaceutical antibiotic. So it's important to know what organism you're dealing with so that you know what the proper intervention is.

so that I think that is why I think tick testing is so important. And with tickreport.com, you will get the results back usually within 48 to 72 hours.

And it's my understanding that we have about a four day window is the best window to get on to pharmaceutical antibiotics or even herbal antibiotics to be able to prevent this infection.

And, you know, I think we all know that are here, that it is way better to prevent than try to deal with a chronic infection. No, you know, you brought up some important points.

And I just want to ask you about these because I have not used Tech report, I've used technology, Colorado and they're also an excellent company. So that's a great, resource for people to know.

Tickreport.com. I'm going to I wrote that down myself so I could, you know, use that.

Proper Tick Removal and Immediate Care

you also mentioned something important about the salivary glands in the tick, some of these tick borne infections being in there, we know that they exist in the gut right, of the tick.

But it is true that some of these ticks have partially fed right before they, they bite people. And, you know, there's this idea sometimes in people that the tick has to be on for a minimum, right of 24,36, 48 hours before it transmits.

So the idea and you mentioned this, that it's in the salivary glands would mean you can have a much more likely, right, exposure to a tick borne infection if it's already in the salivary glands.

And and that's part of the reason. Also you want to be careful when you remove it, right? You squeeze the body. Right. You're pushing those organisms.

into the skin. So so that's really great information. so how should you take antibiotics or supplements? I mean, you mentioned that Andrew Griffiths and, and by the way, I had not this I'm learning from you, by the way, today because this is not something I've done specifically using Andrew graphics is the research that's backing this up.

I mean, we use Andrew Graf is sometimes for, you know, colds and flus and other things. I've not used it topically. Was this something that they were teaching you in school that you got from the naturopathy training?

No, actually. So oddly enough. So, in school, like, you know, in our training, I learned nothing more than, you know, you got to, you know, the kids were playing in the grass and they had an E. M.

rash and some joint pain, and they took 21 days that doxy cycling and all was well, you know, I learned in clinic when I had a patient that had chronic Lyme disease that what we learned just wasn't true.

But I'll save that story for another time. I actually learned about, and a graph is from master herbalist Steven Buettner, who dedicated, you know, his entire life and career to studying mostly, you know, tick borne disease.

yeah. So this is this is something that I actually learned from him. Right. And the beauty about Stephen Bruner is he has huge amounts of scientific references back in reserves.

Right? I mean, we have also used them, so that's great. So. So when should you take an antibiotic or supplements for a tick bite. How do you decide when to do it?

Okay, so let's just start with antibiotics I think it's a little bit more of a shorter conversation. so you know I don't recommend the use. And I think a lot of physicians don't recommend the use of antibiotics unnecessarily.

Right. And so especially if we're talking about with Lyme disease, for example, and we're talking about the need to typically use doxycycline and use it for, you know, from, from what I read it, in my opinion, 4 to 6 weeks to be able to deal with an acute infection.

You know, that's that's a pretty long term dose in an acute situation. If you don't, you know, if, for example, the tick is clean, right. So then we have a study or two that was done a long time ago that I'm not going to get into the reasons why the study was not good, but basically it was.

On taking one dose of doxycycline at the time of a tick bite and its ability to prevent the Lyme disease infection. And so, a lot of doctors in my area are still doing this.

I mean, as recently as within the past two months, I've had a patient come in with that is the treatment I want to be clear, that does not work. It is not effective.

Do not settle for that. If that is what your doctor or the walking clinic that you goes to or that you go to wants to handle this because it just it simply doesn't work.

But I'll spare getting into the details. So you're caught between this decision of do I go on a longer course of antibiotics or do I do nothing? And again, I said, you know, this disease is much easier to treat acutely than it is chronically.

So again, I'm going to go back to if we can get the tick tested and we know what we're dealing with, and we use a company that's going to get us those results within 48 to 72 hours.

You know, theoretically, if you have overnighted that tick and a Fedex package, you can get within, you know, that crucial window to get on the appropriate treatment.

So how I typically handle it is I will start with astragalus and echinacea to boost the immune system's response to these organisms. Okay. Then when the tick.

So basically I want to talk I'm going to digress. I want to talk a little bit. And I get very, very passionate about the pathophysiology of this infection because I think if we can just understand how this infection moves into the body and what it does, it just makes sense how to intervene.

So the let's and let's just focus on lime. So despite Ricky has a flagella which is like this little tail on it. And so it has this protein called the flagellum and the flagella.

And once it gets into your body and attaches to like a blood vessel, stimulates an inflammatory chemical called nuclear factor kappa, beta K, nuclear factor.

Kappa beta is going to kick off this inflammatory cytokines cascade that ultimately breaks down our bodies, allows this infection to spread and makes us hospitable to it, and makes our immune system, like in a chronic phase, not be able to see it and fight it correctly.

So we have IRBs that actually inhibit, have been studied and shown to inhibit nuclear kappa, nuclear factor, kappa beta. And those are Astragalus, cordyceps, Japanese knotweed, ashwagandha, hu tuna Chinese skullcap.

So we have this this big sort of toolbox of herbs that can help to shut down that inflammatory cytokine. Next we have mitogen activated protein kinase or mAPK, KS, that stimulate other inflammatory chemicals like interleukin

eight, interleukin one, beta, that further help this infection get deeper into the body and we can inhibit the mitogen activated protein kinase is using Japanese knotweed and Chinese skullcap.

additionally, this, this organism, these spider kids use various enzymes to break down the connective tissue. Our extracellular matrix, our collagen, our joints, and gain further entry into the body.

And so they use these enzymes called how your Rana days. Agra kinase and collagen. And we can actually inhibit these enzymes again using Japanese knotweed Chinese cats claw as well as echinacea and ashwagandha.

So, you know, this is like a multifactorial or bacterial approach to trying to contain the infection and slow the spread by managing the immune response, the inflammation response, as well as stopping this infection from degrading our collagen and moving deeper.

So that's sort of my favorite intervention, is to get on those herbs. And really we could boil that down to ashwagandha, Japanese knotweed, and skullcap.

The beauty of these herbs is that they have far reaching benefits. They work synergistically. And everything that I just said can actually be inhibited by those three herbs.

So I'd like to start with those three herbs plus astragalus. And to me that gives some protection. And from a theoretical standpoint, while we're waiting to get those results back, and then you can either add the appropriate pharmaceutical antibiotic or anti parasitic or antiviral if necessary, like if it's post and virus.

Testing the Tick and Early Treatment Options

in addition to using these herbs. That's great. So, you know, just to to sum up a little bit for people. So when you're seeing a tick bite for people and again, if the tick is just on for a very short period of time, it easy to remove.

You don't necessarily right. Have to give them anything if it's a very, very short course. But the problem is, is that some of these infections like Powassan virus, which you mentioned, can be transmitted within 15 minutes, and Rickettsia, Rickettsia I, Rocky Mountain fever within ten minutes.

And really a home side relapsing fever within five minutes. So the recent tick prevention is so important. And I think you're discussing these herbs is that even if the tick is not on for a long time, right, there's still a potential likelihood you may be able to, you know, to get these.

So you're using these herbs in people, before they get ill, before they get symptoms using this, for example, they get a tick bite. You're putting them on these herbs.

And by the way, some of these herbs we also know are good for bco. Right. They've been talk about Chinese skullcap Japanese knotweed. Right. Also have some effects with this with the BCA.

So so I'm clear you're using these herbs in a sense preventatively to help the immune system blocking enough kappa B for the immune response. if they don't have active symptoms, because if they do, if they were to get fever, sweats, chills, muscle aches, joint aches, you would then consider at that point, would that be a point you would consider using antibiotics?

Oh, absolute Lee. Yes. So I only got as far as like this is what I would do as soon as I found the tech. and then of course getting the tech results back and then, you know, using that to guide you.

But yeah. So we're going to get into what symptoms to look out for. But yeah, if there were any symptoms, you know, I would call your physician immediately.

And to be honest, you know, I would call your physician, your physician ahead of time, tell them what happened. And, you know, depending on your relationship with your physician and what day of the week it is, you know, you

might have antibiotics called in so that, God forbid, you're symptomatic on a Saturday and can't get Ahold of your physician.

You know, you might have that script there already, right? And the symptoms specifically that people will be looking for, what would be the most important symptoms people should look for after a tick bite?

So I would say, you know, the most dangerous right around where I am at least would be in a plasma. And so you're looking for a really high fever. a severe headache, neck pain.

I would say with any of these infections, the biggest thing that, you know, we're kind of looking out for would be like a meningitis or encephalitis sort of response.

So, you know, I would say as far as like the severity of what's going on, having headaches, head pain, high fever, things like that. But I mean, the symptoms can be mild and people and they can also be very severe and they can range from, you know, having fevers, sweats, chills, headaches, muscle pain, joint pain, fatigue, malaise.

nausea, vomiting. Right. Like this a lot of these will also affect the GI tract. And so often times people just think they have the flu. You know, even with a high fever and all of these other symptoms, people honestly will think that they've had the flu.

And I can't tell you how many patients actually I've had end up in the hospital and just been told, like, you know, this is like going through their history, like, oh, I had this weird mystery virus.

They never figured out what it was, but I had encephalitis, and I've never been right since, you know? so this. Yeah, these are very, very important points you're bringing up.

And I will tell you, I mean, because you can get, of course, sore throats right from getting a tick by with Lyme that you think needs, you know, it's streptococcus, you need something for it or.

But the, the nausea, vomiting, diarrhea. Like talking about the GI symptoms. It's an excellent point for people because almost all of these tick borne co-infections can cause these kind of GI symptoms.

And if you're not aware of this right, you might say, oh, this is a virus. So the most accurate time for testing yourself so people get a bite. They've sent off the tick.

and now they've gotten the report back. But let's say they want to test themselves. They go to their doctor and they want to get some blood tests. So what kind of blood test do you recommend?

What's the kind of timeframe you think that people should be testing themselves to, to see if they have it? And and what are the negatives? Of course.

What are the problems with the testing? Right. So I'll start by saying like minimal testing, you know, should be a complete blood cell count and and a metabolic panel.

So, you know, we can look at the immune system's response, looking at the white blood cells, also looking at neutrophils lymphocytes, etc.. We can look at platelets.

We can look at liver function tests. Because you might see an initial increase in white blood cells or decrease. And you might see elevated liver enzymes.

And you're going to see these changes way before. You're going to see any sort of antibody response. Right. Or, or Lyme testing that's going to come back accurate.

So it takes there's two types of antibodies that are looked at exams, which are kind of like our first line of attack, and then ECGs, which are the ones that come in later exams typically take about 3 to 4 weeks to get them to the

level that a standard laboratory is going to test you, you know, test in the positive range for ECGs or more like 4 or 5 weeks.

So whether you go to a standard lab or even a specialty lab, if you're going to have your immunoglobulin checked for these, for these infections, there is a super high rate of false negatives.

And this is what I see happen a lot to patients. They say, well, my doctor tested me and I'm like one, oh, you know, like three, 4 or 5 days after. And it's like, well, of course you are negative.

Your immune system isn't responding in the level that's detectable. So we have to look at these other things. You know, it can take a little bit longer, but you can see something called an ESR or a set rate go up.

You can see C-reactive protein go up. You can see high sensitivity, see reactive protein go up. You know. So these are like some other tests that you would be able to see way before an antibody response rate.

So you brought up something extremely important that I'm going to highlight for the listeners that the antibodies are not going to form early on. And the reason being you need to look at the white cell counts, the platelet counts and the liver functions.

The ones you mention is that if someone has a low white cell count, as you mentioned, called, look in medicine or low platelet counts, thrombocytopenia or elevated liver functions, any one of these or two together, or all three are indicative of multiple tick borne infections that have kind of gotten into your system, or Lycia and a plasma.

Rocky mountain spotted fever, Q fever, beryllium. Miyamoto a disease heartland virus. Bourbon. All of these organisms from ticks can cause these low white cell counts, platelets, elevated liver functions before the antibodies are formed.

So if you see that that is an immediate reason to go on doxycycline. Right. So that's a it's an excellent point for people. In fact, when I was at HHS working as co-chair of the other Tick-Borne committee, one of the doctors there from the CDC who deals with Rocky Mountain spotted fever and they just you probably know they just had outbreaks in Southern California where people died of it.

You will not see the antibodies early.

Symptoms and When to Seek Medical Help

You do not wait to start doxycycline if you start getting symptoms with these low white cell counts, low platelet elevated liver because you'll die if you don't get the doxy in between 6 to 7 days, you can have limbs amputated and you could die from the infection.

So excellent point. it very, very important. That's a that's like a super important take home message for people. and regarding the doxy, and I don't know, in Connecticut, are you able to prescribe you or you cannot in Connecticut, as a natural path, you have to.

Go natural path. The doctors have literally no prescriptive authority in the state of Connecticut. We have been fighting for it for years. Yeah, it's a shame because someone like you could have given someone doc early on and we don't know.

so so that's it's a great point. All right. So the the time for testing yourself, as you said, can be weeks before the exam. And I would also point out the exam antibody is also seen in late Lyme.

And this is where doctors sometimes get kind of confused because when Borrelia burgdorferi Lyme invades your your lymph nodes, it gets rid of the B-cells, the antibody producing cells for IgG, which is the long term.

And it leaves the exam. So a lot of times people go to doctors. I'm sure you've seen this. The exam is positive and

they'll tell people it's a false positive.

But it's both early and late. Right. So you expect actually to see the exam in late Lyme. In our studies it was about 45% of our our patients were CDC exam positive.

And you're seeing that also in your practice. All the time. Yeah. And I mean I don't mean to sound snarky, but it's it's like that point of contention where the doctors, they they glom on to that and they're like, you know, because also, you know, they might even say, okay, well, this is a new case of Lyme then, because you have exams.

So you know, Doctor Hinchey is telling you that all of these symptoms that you've been complaining for, for like 3 to 5 years are Lyme, but it can't be because this is showing that you have a new infection.

I'm like, no, it's just showing that the infection is is doing what it does. And, you know, changing its shape. For the simplistic way to put it, you know, and and just causing the immune system to, you know, to react to it.

Right. And and going back to the point you didn't want to go into the details, but I will just briefly of why one dose of doxycycline does not work is the real problem with that is when they did the study, there was no good long term follow up and they were looking at M rashes, right.

Which you and I were discussing before, which is, you know, the hallmark symptom. But not everyone gets the rash. Right. It in our studies it was between 10 to 20%.

Some of the studies it's 40 to 50. You'll see the CDC sometimes report 70 to 80%, which is not really in my opinion, what's really out there these days.

And half the time they look like bullseyes, half the time they're solid red spreading rashes or, you know, macular popular if it's really Mayo night from the Midwest.

So you know, excellent point that one dose stocksy I want to bring that up again. It was never validated right in that study. And you should be asking what you and highlighted before.

You should be asking for your doctor for at least several weeks of Doxy cycling. Right? You need at least 7 to 10 days. You know, if you've got her like you and a plasma Rocky Mountain spotted fever, it's a minimum of 7 to 10 days to be able to clear that infection.

yeah. So very good points who need prophylaxis before a tick bite. What do you what do you suggest to your patients? You're in Connecticut. Very high endemic area.

What do you suggest to people to not get bites okay. To not get bite. Well, I would say number one. And I don't think this is what you're asking, but I'm going to start here.

Tick tick tick tick tick checks right. If you can get it while it's crawling on you, you can you can stop it from biting you. Right. So, I have a son. He's seven.

The poor thing. He's never gotten to go to bed once or come in from being outside without having the complete strip down. I mean, even from being, like, six months old, you know?

So I just cannot emphasize the importance of checking yourself and your children and your pets because they will bring them into the house for ten years.

So that to me is number one. Tick checks. number two, I really like. So I have a huge family of hunters and I love the tick Shield clothing. So, I had seen a study gone way back that showed that something like it was almost 80% of ticks.

When they get on to you, they get on to you below your knees. And so if you have these stocks that have been

treated on, you know, you're going to catch most of them there.

Obviously that's not always true, but a for a majority of the time, obviously you can use cedar oil. And there are a ton of different essential oil sprays out there.

you can put, permethrin around the soles of your shoes. you know, there there are a ton of different things that you can do to put on your clothing. You just want to be very careful again, depending on what you're using.

because it is a neurotoxin, you know, and so you, you need to be careful that you're not getting it, especially with, with your children. So I would say checking for ticks, treating your clothing, obviously, you know, if we're talking about like in your yard, in your garden, spraying your property, you know, keeping your property cleared, keeping, leaf litter cleaned up, you know, keeping as much sun exposure on your yard as possible because ticks hate dry, direct sunlight.

It dries them out. Ticks love moist pool, warm areas. It's their favorite habitat. Great. So. So again, just to sum up, you like, permethrin right. For the treated clothing.

But again, if you're going to use it yourself you take it outside and spray the clothes. Do not get it on you. Right. Because it is a toxic substance.

I also like picaridin. I mean, I found that 20% picaridin generally, I mean, I, I've looked at the safety studies. I mean, these are chemicals, of course, but I think the risk benefit, I use it personally when I go outside and, I'm in my yard because we're living in an area though, although New York tick control, which is also Connecticut chick controlled in new Jersey with Rich and Dave Wittman, they're an excellent company.

They come twice a year. By the way. We have a little over four acres. I have 50 bait boxes around my property, where they've got, you know, oats in there for the mice to go on.

And it's killing him with the permethrin. And we put in an electric fence for my dog Molly, because she like to play with the fox. And we go up the hill where the fox was.

Blood Tests, False Negatives, and Early Lab Clues

The fox grew up, by the way, with Molly, and they would run around the yard together one day my dog was outside and the fox came and she was on a long lead, and she came on both paws, like coming slowly rolled over.

My wife and I looked at this and then pulled on the cord from Molly and went, I'd like to play with your dog. And we looked at each other and we went, Fox is like communicating she wants.

So Molly thought, oh, how much fun we eventually ended up getting, of course, tick prevention for her. some park a trio. Some people use front line. But you're right about the pets.

You got to be very careful in this area. and the lemon eucalyptus oil. I mean, you mentioned that with the essential oils, it's a very good one. It's actually been well studied.

I don't personally prescribe deet, I you were talking about it. The neurotoxic stuff. I think for hunters deep in the woods, if you want to use 20 or 25% on a rare occasion and you're older because the neurotoxicity was mainly in kids with seizures.

Right. but but I will point out in pregnancy and this is maybe something, you know, if you've used it or not, but, Avon skin so soft makes one called IRA 3535.

It's an amino acid base they used in in Europe for about 40 years. Have you had any experience? Because I don't use it often, but if I have a pregnant woman, I'm always thinking er 35, 35 because it's naturally based and they've got studies in Europe on pregnancy.

So we use that a long time ago. it was my grandmother's favorite thing for keeping mosquitoes away. But no, I honestly forgot about skin so soft I have.

Yeah, I haven't thought about that. And yeah, I don't tend to use it as much because when I put it on myself, the mosquitoes love me. I put on a lot of heat, carbon dioxide.

So for me, I've tested 5%, 10%, Picaridin 20% is like the only thing for me. Keeps the mosquitoes away. Fortunately, we haven't found six in a while. But, But yeah, you've got to pay a lot of attention.

so the tick testing companies, you went through this and the time to transmission. so we talked about symptoms before, and I want to talk a little bit about you mentioned it's very, very important about these great imitator things.

We had a guy in our area, I can mention the name because he passed in. His mom is, you know, told me about this. His name is Joseph Aloni, and he went to a local doctor here in Dutchess County with a sore throat after going to Rhode Island.

He had some swollen lymph nodes and he had some diarrhea and stuff. And you brought this up and they said, it's a virus. Come back, you know, in a couple of weeks.

He came back a few days later with a sore throat and they said, all right, we'll check you for Lyme. They didn't. Eliza. Right. The test was negative and he died three weeks later from Lyme colitis.

He had an infection of his heart. And you brought up a really, really important point about these symptoms that the ones that docs may not be looking for in the springtime or summer or fall is like sore throats and swollen glands or GI symptoms with nausea, vomiting, diarrhea.

Very, very important to be able to look for these type of things. Because if you've got like the low white cell counts, low platelets, elevated liver with that, you know, automatically, right.

You've got to be able to treat these people. so so I just want to point out those are really, really important symptoms you brought up after a tick bite.

and, and for me, you know, fortunately, I see mostly late Lyme at this point. I don't see a lot of early Lyme. but I will tell you, in the last couple of years with the climate change, with the ticks exploding, I mean, we have people calling all the time regarding tick prevention and regarding, you know, courses of doxy cycling.

I'm sure you're probably seeing the same thing at this point. Yeah, I am, and I mean, you know, so I'm in Connecticut. We are mid or I guess the beginning of January.

And I mean there are still ticks out right now. Like literally right now I have a picture of a tick crawling on snow. So I mean, it's just, you know, people think, oh, it's summer.

And it's like, no, it's year round. I don't care where you are. It's year round. Yeah. can we discuss for a second the use of doxy in pregnancy and kids?

Because this was also one of the things that was brought up by, the rickettsia researcher from the CDC. And I was there. Can you talk a little bit about using doxycycline in, in, in pregnancy and in children, because there was a lot of controversy early on about tetracyclines and teeth staining.

do you recommend it at this point? You pros and cons. So, I mean, I would say I looked even the CDC is saying that a short course of doxy cycling is safe in children and does not cause the teeth staining.

So, that was based off of older generation tetracyclines. So you typically aren't going to see that now. what I will say about pregnancy is that from what I could see, it still isn't recommended.

You know, there hasn't been any quote unquote studies that I could find. because they don't do studies on pregnant women. And, you know, typically they are recommending amoxicillin and soft ten.

But again, when I say they, you know, when we're talking about the CDC and kind of like, you know, we're not talking about Lyme literate bodies of of of people here. So, honestly, I'm going to defer back to you as far as using doxy cycling in pregnant women.

You know, I fortunately have not oftentimes had to use it, but at least what I got and the only reason, by the way, I learned this, is when I was co-chair of the other Tick-Borne infections and, and subcommittee.

one of the researchers from the CDC, we discussed this in detail. And kids had died from Rocky Mountain, spotted fever in the United States, or liqueur and a plasma because the pediatricians below age eight would not give them a tetracycline.

And you brought up appropriately it's the older tetracyclines like tetracycline HCl that causes the teeth staining doxy cycling, and this is specifically doxy does not cause teeth stating in short amounts in kids.

When I spoke to this particular researcher, he said that a short course of doxy in pregnancy actually was okay. for the same reasons that we not expecting teeth staining.

We're not talking long courses. We're talking like. And you talked about this. You get a tick bite, you send it out to either technology or tick report.com.

You get back that it's containing or liquid and a plasma Rickettsia Rocky mountain spotted fever. Really? Miyamoto's a Lyme disease. You've got a risk of that being transmitted to in pregnancy and to the child in those circumstances.

Amoxicillin and sefton is not going to hit those organisms. You need a tetracycline like doxy. So the only reason I learned it is I got it directly, in the sense from the CDC directly when I was on the subcommittee.

So I've not had to do it, by the way, often, I think only once in my entire clinical career, thank God. But we do use antibiotics in pregnancy to prevent transmission.

and again, specifically, it's in it's penicillin, cephalosporins. Right. that are primarily used. so I think that's just an important point.

Prevention, Repellents, and Tick Checks

do you have a sense of this, by the way? This is an unknown area, but I just want to point out, because I've never seen good literature on it, these people that get tick bites that, you know, most of them, 75% of them, especially if you treat it early, they do not go on to chronic Lyme.

But there's always these people, right, that go on to chronic Lyme. And I just want to point out that we don't really know exactly why. We don't know if there's biofilms inside the ticks.

I don't know if you've read anything on this. This is a question even I have, whether there's biofilms initially in the ticks in the gut or in the salivary glands that when it's transmitted, is fighting the spider.

Kate. Maybe they fed in other animals. This is kind of an unknown question. But, you know, I think the thing that's important here is not everybody who gets early prophylaxis is definitely it's going to work.

Right. So you've got to really be careful in these type of people to watch. because once establishes in a chronic infection, it's obviously much more difficult to treat.

so I just wanted to point out we still have a lot of unknowns, right, regarding this with these tick bites and exactly

what to do. And it's also different ticks, right?

We've been discussing mace, mostly Ixodes, scapular right. The deer tick. Right. But if we deal with, for example, the lone star tick right, which is now spreading right across the United States, we're dealing with tularemia or licky alpha gal allergy, Rocky Mountain, spotted fever, heartland and bourbon viruses.

star ry, southern tick associated. So even in those cases, right, if you get a lone star tick bite, the doxy may be helpful. But not for alpha gal, right?

These people that get these red meat or alpha gal allergies. Right. This is now becoming a really big problem if you if you I'm starting to see them in my practice.

Have you, have you also seen a couple. Have you, come across it at all? I have I've seen to two patients for that. I want to back up for a second too.

So, like, for our listeners that maybe don't understand what the biofilm is, you know, it's kind of like this fancy 3D structure for almost what the infection is used to evade the immune system.

And so, like Doctor Horowitz was saying, like, this could be a reason why, even if you're put within the right amount of time, for the right amount of weeks, right, the right antibiotic, you could still end up with chronic Lyme.

And, I was reading that like, you know, these bacteria can actually establish biofilms in the body within like 48 hours, right? So it's not like you only get biofilms with chronic tick borne disease, right.

Or chronic Lyme. This actually can can happen pretty quickly. and I want to share because I think this kind of just drives at home. So I dropped my son Everett off for his little, moving up ceremony for kindergarten at school.

And like I said, the boy has never gone to bed without a tick tock. Like I'm a crazy person when it comes to ticks. It's like one of my husband and my, like, points of contention, you know, because of what I do all day, he did not have a tick on his face when I dropped him off.

The little boy walks in with this little cap that he made in his little gown to go up there and like. And I see this teeny tiny. It was a nymph deer tick.

I saw it from across the room, and my husband had to hold me in my seat as I'm screaming, he doesn't have a freckle there. He doesn't have a freckle there. Okay?

He did not have a freckle when I dropped him off an hour ago. We did everything I said, so luckily his school is less than a mile. I literally laughed as soon as the little you know, before the refreshment went and got the herbs, brought him back, forced him to take them, sent the tick out the tick tested positive for Borrelia as well as Rebecca.

but started him on the herbs immediately. He never had any symptoms, right. But I had to know. I waited the four weeks I tested him, he tested positive for Borrelia and for babies.

Yeah, and it was via Duncan, which is the same baby that the tick had tested positive for. So he made antibodies, but he never developed simple terms.

Oh, that's. Question I sent, tested him and it went away and it went away. And I mean, I could go on and on about my kid for hours and I won't. But my point is, is like that tick was not on him for more than an hour, and it transmitted both of those organisms.

And the fact that they were this, the organisms to this species that the ticket self tested positive for, you know, tells me like he didn't get this from me, congenitally.

You know what what what this brings up is what, you know, you were talking about this early and this is a really

important point for the listeners is that if these tick borne infections are in the salivary gland, and most of the time when it's been talked about, it's because the ticks have fed on another animal partially fed.

So the bugs moved from the mid, got into the salivary glands. And once they bite you, they're already in the salivary glands. And they can be transmitted very quickly because you hear from most doctors.

Oh it's it's 24, 36, 48 hours to transmit. You're proving it yourself. And we know this from the studies that that's not the case, especially if the tick has partially fed.

So that is the reason tick checks. As you said you're a very vigilant mom, by the way. If you can spot a freckle from across the room in your kid. Bravo, bravo.

but but you're right. and what's interesting about it, especially in the case you just is that clearly there had been some exposure with the antibodies reforming, but obviously you got it early enough, right?

With these herbs. And you never you never gave him any antibiotics, and yet he never had symptoms. So not to go off on a whole big tangent, but long, long story short.

So the only time this has ever happened, we've probably sent a good 12 ticks to tick report.com Fedex lost the tech, so it took us about ten days to get the results back.

And at that point and so two things to share. Yes the tick was partially engorged. It said so on the result. And by the way I went like this. And the tick came out of him. He it was in him.

It wasn't just on him, but I mean, that's how easy it was to remove the ticks. Even in or even engorged with it not being on for that long. Right. Wow.

So my husband and I and you know, it's funny, my husband looked at me and he was like, hey, you know, herbal Queen, put your money where your mouth is.

He doesn't have symptoms. He's be outside of what you claim is the window you believe in. These herbs are not honest to God. And I mean, this kid is like my life, you know what I mean?

So it was the hardest thing to do. But we decided to go with the herbs because he wasn't like he wasn't having symptoms and we were outside of the window, etc., you know, plus we this was when, you know, the newer studies showing, you know, that crypto lapis has effectiveness against persists or cells and, you know, like some other study that had come out showing like Japanese knotweed cats call.

And by the way, like I'm almost embarrassed to say I had that poor boy on 18 herbs.

Pregnancy, Children, and Doxycycline Considerations

I mean, I went into my office like a crazy person and and I kept them on, kept him on them for an entire year. you know you. Well. Well, now, once you understand how severe these tick borne infections are and and these herbs are safe.

I mean, I've certainly been using them myself for years. Risk benefit. Right. Everything in medicine is risk benefit. But the thing that's interesting about your story here is normally in medicine we think about engorgement for a tick that the ticks got to be on for at least 48 hours right before it's going to start to get engorged.

And you are so vigilant that when he left in the morning, you didn't see the freckle, but by the evening, which means that. Once in the evening it was an hour later, because it was his moving up ceremony.

We brought him at school to get ready. We went and did a few things. Came back for this little like graduation moving up ceremony. This was not a normal school day.

So tick report within. I mean, just so I'm clear on this, because this is unusual. Even within one hour when you sent out this tick, it even said it was partially engorged.

The report came back partially engorged. Yeah. So I think it must have been scratched off another animal and then got on to him and then started feeding.

Like, I think it was already partially engorged when it attached itself to him, which is why he got the transmission of the organism so quickly. Yeah. Great.

Well, well, I mean, you're right. I mean, the thing is ultimately clinically, you you always you treat patients, you don't treat blood tests. I mean, that is always a rule of medicine.

because I have had people come in, for example, with positive Lyme tests who have absolutely no symptoms. Now, what I will say, and sometimes in these cases, not necessarily for your son, but in an adult population, if someone comes in and I see a positive Lyme test that says there's absolutely no doubt like even their Western bladder immuno blot, they've got the Lyme specific bands 23, 31, 34, 39, 83, 93 and they're asymptomatic.

What I usually still will tell them is you and I need to discuss 3 to 4 weeks of doxycycline in case, God forbid, anything ever comes out later on. I want to at least be able to say medically, legally, that I treated you with 30 days of doxycycline when I saw your positive Lyme test.

Fortunately, those cases don't come in very often. Most of the time these people are symptomatic. But you know, you bring up an interesting case of you.

We will occasionally see people, right, who have antibodies, who are not that symptomatic. And the rule of thumb is you do treat patients, right. You don't treat blood test, but you've got to use that clinical decision making right to be.

Yeah. And let me be very, very clear. This is my son I would not that so what I chose to do the the choice that my husband and I made with our son is not my medical advice to a patient.

My medical advice to a patient would be the standard of care in the sort of, you know, Lyme literate world, which would have been 4 to 6 weeks of doxycycline for the Lyme and, you know, potentially a toe of a coin and is a promise and for, for the babesia.

Yeah. Right. Right, right. Although it's a good no I mean it's a good point. And the babesia is much more difficult to treat, especially now because these species have become resistant to a terrible component.

Is that remission and declines. And so even, you know, thank God he didn't have symptoms. The malarial symptoms, air hunger, cough, day sweats, night sweats, chills, because it is a difficult infection to treat.

But you know, kids generally they're they're generally on you know, they are healthier. A lot of times when they come in, they're they're much more resilient.

Biofilms, Chronic Infection, and a Personal Case Study

I don't have a pediatric population in general, but in the few kids that I have treated, they've definitely recovered very quickly and seem to be much more resilient.

Yeah. He's no longer testing positive either for either. So. Right. No, no. That's great. any last things that you want to talk about? The, the you know, from my perspective, this is a really, really important talk because the most important thing, you have to know what to do.

If you get a tick bite and you get a check on you. And the fact is, is that sending out the tick makes absolute sense, right? Knowing that the antibodies are not accurate, knowing the low white cell count, platelets, elevated liver functions, knowing it's a broad range of symptoms.

You brought up some really important points. Anything else on this you think it's important to share with our listeners? Well, on a lighter note, I guess I would say don't panic.

Right? We get really stressed out and we panic. We're going to release a bunch of cortisol. It's going to suppress our immune system. And if there is anything there, it's going to give it a stronger foothold, right to to cause issues.

So, you know, try to stay calm. I would I would have someone who is knowledgeable about Lyme and Lyme literate, you know, around you just just so you have somebody there when you need them.

but really tick check check check check check. Prevention prevention prevention. Right. And keeping in mind the reason this prevention is so important is that things like Powassan virus, which are transmitted within 15 minutes, there is no cure for Powassan, right?

So about 10% of these people get, a neurological form of it where they do get a meningitis encephalitis. there can be long term consequences. People die right from Powassan.

We're seeing more and more cases in the United States. they do have a vaccine for tick borne encephalitis in Europe, which is similar, which is also, by the way, transmitted by raw, unpasteurized goat milk.

a little scary in Europe with that one, although I haven't heard a lot of cases of it. But the reason the tick prevention is so important is that if you get alpha gal from a Lone Star tech, there is no cure for it.

You've got to avoid these things for the rest of your life. If you get Powassan right, there is no cure. So we do have cures right? With Doxy cycling and some of these early on.

But the prevention aspect, I think is absolutely crucial. So you don't get sick.

Final Prevention Advice and Contact Information

And, you know, I, I joke with my patients because occasionally after I've got the more of a Lyme with the Dapsone protocol, they've come in with tick bites and I tell them to come in in person.

Don't do this by telemedicine, because I'd like to put my hands around your neck or give you a good spanking, because you have got to be kidding me. After all the work we did to get you better, you're now not doing tick prevention in the right way. So, yeah.

I and by the way, doctors don't have a lot of time at the end of visits, right, to discuss this. But you and I know this is kind of one of those things, like, how's your blood pressure?

How's your cholesterol? Are you getting enough exercise and sleep? How's your diet? And are you following tick prevention? Right. It's one of those things in prevention.

It just needs to be part of a regular medical exam. And what doctors discuss. Yeah, I couldn't agree more. I don't understand how. I could go on a whole nother tangent.

I don't understand how being Lyme literate is not a requirement. Well, it may it may be at some point in the future as people realize how bad this epidemic has actually gotten.

But, listen, I want to thank you so much for taking the time with us today about discussing this important talk of what not to do when you get a tick bite.

So this is Myriah Hinchey in Connecticut. Myriah, tell people again how they can contact you if they want more information. Sure. You can go to taovitality.com or call (860) 228-1287.

Thank you. So thank you everyone for joining us again for another episode of this DrTalks episode of the Healing

Lyme Summit. my name is Dr. Richard Horowitz with my co-host Myriah Hinchey, and we hope to see you again soon.

Thank you so much for joining us today.