

Co-infections and how to address them

Guest: Dr. Evan Hirsch

Disclaimer: The contents of this interview are for informational purposes only and are not intended to be a substitute for professional medical advice, diagnosis, or treatment. This interview does not provide medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition.

Kirsty Cullen - [00:00:15]

Welcome to the Fatigue Super Conference, I'm Kirsty Cullen, CEO at the Optimum Health Clinic, and today I am joined by Dr. Evan Hirsch.

Hi there, Evan.

Dr. Evan Hirsch

Hey, Kristy, thanks so much for having me on.

Kirsty Cullen

Absolute pleasure. Just to introduce Dr. Hirsch, he suffered with chronic fatigue himself for 5 years and found resolution with the development of his own program aimed at addressing the complex and multifaceted aspects of fatigue.

Founder and CEO of the International Center for Fatigue and best selling author of '*Fix Your Fatigue*', Dr. Hirsch has helped thousands of people resolve their fatigue through his online programs, one to one coaching and podcasts. So it's an absolute delight to welcome you Evan as a guest speaker for us today.

Dr. Evan Hirsch

Thanks so much for having me.

Kirsty Cullen

And I believe always that clinical advice is always so meaningful when a desire to help people with a condition has been motivated by personal health issues and health issues of close family and friends because there's that real kind of grass roots understanding. I know that you shared your story so many times, but for those who haven't heard you speak before Evan, I wonder if you could briefly touch on your own personal experience with ME/CFS.

Dr. Evan Hirsch

Of course, so for me it started when I began my residency program back in 2004 and it wasn't even about me. I had met my wife, we fell in love. I had just moved out to the West Coast in the States. And then three months later, she couldn't get out of bed. And there weren't a lot of resources at that time. I was going through my family medicine residency and I asked everybody that I knew, all of my attendings, all the specialists. And from a conventional medical standpoint, it's liver disease, lung disease, heart disease, thyroid, mono, and that's about it.

And so she went on a journey and she was mostly better after about 3 years by using sauna and optimizing her adrenals and doing a number of other things, a lot of emotional work. Unfortunately, well, fortunately, we got married, had a child, started a business, graduated residency, not necessarily in that order.

And then a couple of years later, as I'm practicing functional medicine already and I'm helping people with fatigue and other complex issues, I get fatigue. And my fatigue lasted for about 5 years and it just about destroyed my life, just about destroyed my relationship with my wife. Now we have this new baby. I can't even help out at home. All of my guilt and my shame issues are piling up on top of me. I have 10 employees and 4000 square feet of office space and I can barely remember the name of the person sitting in front of me, my brain fog was so bad.

So for me, and I wasn't a great patient. I wasn't taking good care, I mean, I was taking good care of myself in terms of I was gluten free, dairy free, I was doing like all the functional medicine stuff. And I was like, why is this still happening?

And so for me, it was making that commitment to myself and saying, I am not going to stop until I find all the causes. And as we'll get into it, there are a lot of causes and everybody has a multitude of causes. And so, that really became my mission. And then I wrote the book and helped thousands of people at this point.

Kirsty Cullen - [00:03:40]

And I think what you describe there is so important because it shows the interface between the biochemical and then the psychological aspects of the condition. And you really can't separate those, can you? Because obviously they sort of feed into each other, don't they?

Dr. Evan Hirsch

Absolutely, yeah. And the emotional stuff wasn't something that I really understood coming from more of a biologic model, but I learned a lot from my wife, who's a mindfulness coach and a meditation teacher and stuff like that. And I saw how she got over it. And I've seen a lot of the limbic system retraining stuff and how much that's helped as well. And so, yeah, we definitely incorporate all of that.

Kirsty Cullen

And over the years, obviously, your appetite for knowledge about CFS has been voracious and led to the developments of your four stage plan. So before we start talking more specifically about the role of infections in CFS, which I know we want to do, can you just offer as, an overview of your approach to fatigue cases and what that looks like?

Dr. Evan Hirsch

Yeah, that's a great idea. Let's do that.

So what I found is that there's really 10 categories of fatigue and those can be broken up into deficiencies and toxicities. So what we're doing in that four step process, the first step is to assess all of the causes that somebody has. Those 10 categories, which actually can be broken down into 33 different causes. Don't get overwhelmed by that because 75 percent of those causes can actually be determined by symptoms alone. So when we have people go through our program, the first step, where it's full of checklists and whatnot, they can go through it in an hour. They can know 75 percent of their causes. They can know which causes they really need to get their labs for and which ones they don't.

So that's the first thing that we do, because everybody's got 8 to 10 of those categories, and it's different than their neighbors. So somebody might have causes 2, 4, 6, 8 and 10 and somebody else

might have causes 1, 3, 5, 7 and 9. Consequently, their treatments have to be different. So that's where we start off in step one.

And then in step two, we start by replacing the deficiencies. And these are deficiencies in hormones like adrenals, thyroid, sex hormones, deficiencies in nutrients, vitamins and minerals, deficiencies in lifestyle habits. So not enough good food, not enough water, not enough sleep, not enough movement. Deficiencies in mitochondrial function, deficiencies in neurotransmitters. So that's what we want to do first, because those are kind of the main leaks that the body's having. And we have to build those up to deal with the stress of removing the toxicities in step four. So step two replace deficiencies.

And then step three is opening up the detoxification pathways. If we want to get rid of anything out of the body, we have to make sure that when we start pulling step four stuff into the bloodstream, getting it out of the tissues, that all those pathways are open. So we're talking about opening up the bowel, make sure there's a bowel movement one to two times a day, opening up the lymph, which is the garbage system of the body, opening up the kidneys and the liver and the neural lymph, which is the brain lymph, and making sure, I like to see the body like these tubes where you're basically dumping, those are the detoxification pathways, and so if you're trying to dump toxicities into those tubes and they're clogged, you're not going to have much success, they're just going to come right back out. So you have to make sure that these tubes are open and patent so that those pathways can function properly.

And then we go into step four, which is removing heavy metals and chemicals and molds and infections and allergies and negative emotional patterns and electromagnetic fields.

Kirsty Cullen - [00:07:27]

And I always think, Evan I'm sure you'll agree, step three is fundamental, isn't it?

Dr. Evan Hirsch

Oh, yeah.

Kirsty Cullen

Absolutely fundamental because if we don't get, what I call the exit doors open, then stage four can feel really, really uncomfortable. Can you just describe what that might feel like if we haven't attended to those detox pathways?

Dr. Evan Hirsch

Yeah, that's a great point. And that's one of the main reasons why people aren't successful or why they have really strong herxheimer reactions, or die off reactions, is because those pathways aren't open. And those symptoms can really be anything. Usually, it depends on what you're going after. So if you're going after particular infections, you're going to have worsening of those infection symptoms. And we're going to talk about more of the symptoms associated with infections in just a little bit. But you can feel like you're having the flu. You can, there's just all sorts of symptoms that people can experience that makes them feel worse because they're killing infections, those infections are releasing their toxins into the bloodstream, the immune system and the body is reacting and and you just feel like crap.

Kirsty Cullen

Patience is key, isn't it, because often within that stage three, it's not a stage where you're necessarily going to get huge energy wins because you're preparing and kind of setting up. So I always counsel very carefully around that sort of point of the work.

What expectation do you give around timeframe for that preparation phase?

Dr. Evan Hirsch - [00:08:58]

So, yeah, I do it generally in a month, so we're ramping up on a number of different herbal preparations and because I work internationally across state and national lines, everything that we use is natural. They're all supplements. There's no prescriptions or medications in any of this. But we introduce those things one at a time, working from the bottom to the top. So bowel, liver, kidney, lymph, making sure that one thing can dump into the next thing, so that we make sure that we're successful.

Kirsty Cullen

And I know we're going to talk a little bit more about some specific infections, but can you just start that dialogue by explaining generally how and why infections in the body can be so crucial as a contributing factor to fatigue?

Dr. Evan Hirsch

Yeah, the more that I live in this world of ME/CFS, the more that I find that it is very rare when somebody does not have an infection. And a lot of it has to do with the fact that if you see the body as a barrel, like a rain barrel and it's being filled with toxins over time, eventually the immune system goes off into left field, the immune system gets dysfunctional. And then at that point, these bugs, which were kept in balance by the immune system, become opportunistic. They see that there's an opportunity for them to come out, utilize the inner workings of the body and start to cause problems. It's not problems for them. It's problems for us.

But it's really that buildup of toxicities, because it's rare when it's just the one thing that's going to cause fatigue for somebody. It's always this buildup of stressors, whether it's a mental, emotional or a physical stressor. Over time, you just get all of these hits until there's a straw that broke the camel's back. And we think that, oh it was just that one thing, but in reality, it was all of these things leading up to them.

Kirsty Cullen

And it's been described to me as this kind of principle of 3 I's, so infection, inflammation and immune dysfunction. And understanding that can be so crucial to kind of understanding the complex fatigue picture can't it?

Dr. Evan Hirsch

Absolutely, yeah, and all of this is inflammation, if you work backwards from pain and dysfunction, you get inflammation. And so inflammation is the immune system reacting to something. So whether it's heavy metals, chemicals, molds, infections or the adrenals are not keeping the immune system in check, the immune system is going to be reacting to those things, causing inflammation. And then the inflammation gets stuck in an odd position and you get damage to the tissues inside the body and you get pain and dysfunction, fatigue, body pain, whatever it is. It's a good point.

Kirsty Cullen

And Evan, people are often quite familiar with infections such as Epstein-Barr virus, which is obviously associated with chronic fatigue quite often, but other infections such as herpes and borrelia even. But I find, and I'm interested to know if you do, there's often quite a lot of education to be done around some of the other lesser known co-infections that we might see in the fabric of a fatigue case. So I know today you and I are going to discuss both Bartonella and the Babesia as two examples of that.

So could we start by, just discussing how does someone know, for example, if they have the Babesia, what might they expect to see or what symptoms might they expect to present with?

Dr. Evan Hirsch - [00:12:41]

Yeah, so Babesia is very much like a malarial organism, it's intracellular inside the cell, and it will cause symptoms like spontaneous sweating or feeling hot. Usually this person is the hottest person in the room. They may be outside in winter with a t-shirt on and wondering why everybody is looking at them funny. Sometimes those symptoms will happen every day. Sometimes they'll happen episodically or cyclic. So maybe it's once a week, maybe it's once a month, really depending on how active the infection is. Oftentimes they'll have awful sleep, so hard times falling asleep and/or staying asleep, they'll have anxiety to the point of panic attacks, they'll have depression to the point of suicidal thoughts. And they'll have something, some issue with the lung where oftentimes that might be shortness of breath and might be a chronic cough. There are a number of different things that might present from the lungs, but those are kind of the big ones.

Kirsty Cullen

And I think this is really where the whole point of differential diagnosis becomes so important because those symptoms we might associate with other things, I mean, you just take sweating, for example, and we might think of night sweats as low blood glucose levels, or we might automatically think of female hormone balance. So it can be so important to have ruled those differentials out, but also to be viewing these symptoms maybe in clusters of the other typical immune symptoms. And then working out whether we need to consider infections as something we're going straight after.

Dr. Evan Hirsch

Yeah, that's a very good point because, and you don't have to have all of the symptoms that I just mentioned, but having a few of them, like if you've got the sweating, the episodic sweating and then you're having a hard time sleeping, but that could also be menopause. So, you know, depending on what the timing is of it and stuff like that.

I have a client right now who's going through a similar process where she's perimenopausal and trying to decide, is this Babesia or is this perimenopause and a deficiency in estrogen?

Kirsty Cullen

And once you start working on those infections Evan, how quickly would you expect to see some of those leading symptoms recede?

Dr. Evan Hirsch

So it's pretty quick. It really depends on how open the detoxification pathways are, how many other causes are present, but usually what we start seeing, and the herbs that we're using are quite potent, so sometimes we're even just having them rub one drop on the hands at night, every other night, as we start to ramp up. But we'll hit a dose where all of a sudden the initial or the first symptom will go because usually with those conglomeration of symptoms, what we see is that one symptom will go at a time.

So with Babesia, they'll stop sweating as much and then the sweating will be gone. And then the next one will be, and then as you continue the ramp up or even just staying on the dose that you were on, depending on how you're reacting to your dose and how much die off you're having, then you might notice a couple of weeks later, sleep is getting better and then sleep is resolved and then the next symptom will go away a couple of weeks later. So it really depends on the individual, but usually it's pretty quick.

Kirsty Cullen

And in terms of having infections on board, what is the real time impact on energy provision?

Dr. Evan Hirsch - [00:16:12]

So I would say that it's significant. Oftentimes we can get a really significant jump in somebody's energy from going after infections.

So like I said, in the first month, depending on the number of causes that you have, if you have, let's say, Babesia and not many other causes or they're not that severe, and you start on a treatment plan, in about a month in, you might notice, with some of the resolution of the symptoms, you're going to notice a huge improvement in your energy, especially with something like Babesia, where it's going to make Borrelia, Bartonella, Anaplasma, a number of these other infections, three times worse. So it's one of those that's really important to go after first.

Kirsty Cullen

And there's always that consideration isn't there, that these infections are seldom there in isolation, they're a cohort of other infections that are also present.

Dr. Evan Hirsch

Exactly, yeah, and so people might ask, where do you start? And so I always like to start with the symptoms that are most prevalent, that are most present, the ones that are popping out that are saying pick me or I'm the most annoying symptom. Those are the ones that we go after, because also, it feels best for the client. The sooner the client feels better, the sooner they really understand that this program is going to work and they're going to buy in a lot more to it.

Kirsty Cullen

So let's talk a little about Bartonella now, again, same question, what would we expect to see clinically with a Bartonella infection?

Dr. Evan Hirsch

So oftentimes people will present with pain on the bottom of the feet, usually misdiagnosed as plantar fasciitis. And this might be a burning pain. It might just be a discomfort where you prefer to walk around your house in slippers. Usually if you're feeling along the inside, the inner ridge of your foot, you can notice that there's some discomfort there. Sometimes the pain is in the small joints of the feet or the hands where it's like a deep bone pain. Oftentimes there's muscle cramping.

So this might be muscle cramping in the calves usually at night, but it can be any sort of tension or tightening of the muscles. Oftentimes people are misdiagnosed with fibromyalgia. People will also have stretch marks or striae, it looks like they've actually been scratched. And those symptoms usually are not related to any sort of weight gain or weight loss that somebody has had. And usually they're in weird positions or sometimes they're on the back or the back of the leg, you know, where you just don't understand why you have it and you've had it maybe, sometimes since a young age. Oftentimes people say, I never understood why I've had that for most of my life. And that would have been, if you got it early on in life.

Other symptoms include things like headaches and migraines, problems, sleeping, but not as bad as Babesia. Anxiety and depression, but not as bad as Babesia. And then thyroid issues, serendipitously the only way that I've ever found to reduce the amount of thyroid medication that a person needs to take, has been by treating Bartonella. And, I didn't know what was happening the first time that this occurred, where somebody called me up after hours and said, you know, hey, I'm having all of these symptoms, my heart is racing, I'm feeling hot, I can't sleep, I feel like I just drank a pot of coffee. And I didn't know what was going on. I said, when was the last time that this happened? And they said, when I had Graves' disease.

So this was somebody who had Graves' disease, which is hyperthyroid, now they had hypothyroid and so they were on thyroid medication. And I had just started treating them for Bartonella. And we were, it was just one drop of a tincture for getting rid of Bartonella. And I said, well, OK, you're on

thyroid medication, let's just start decreasing that. And we were able to wean her entirely off thyroid medication and she hasn't ever had to have been back on it. So that's a fun, serendipitous story. But those are the main symptoms that we see related to Bartonella.

Kirsty Cullen - [00:20:21]

And it's incredible, isn't it, that you can see patients who have struggled with really resistant symptoms for years, as you mentioned, kind of a thyroid related or muscle cramps that we might associate as a magnesium deficiency or sleep issues or anxiety issues. And they've tried everything in and around nutrient deficiencies and considering other root causes and actually you've got a common root cause here, which can present in so many different symptoms.

Dr. Evan Hirsch

Yeah, and I'm glad that you brought up the magnesium deficiency, because people who have cramping, muscle cramping, that's not related to intense exercise, and sometimes even if it is, and they'll take potassium or they'll drink more water, or they'll take magnesium and it'll fix it. It still doesn't mean that they don't have Bartonella because oftentimes you can get rid of the Bartonella and then they no longer need those band-aids, even though they're natural band-aids, they no longer need those band-aids.

Kirsty Cullen

And is there a relationship between our furry friends, cats and Bartonella infection?

Dr. Evan Hirsch

So, upwards of 50 percent of all domestic animals will carry Bartonella. So this means that if you've ever been licked in the face by a cat or a dog, I don't know about rabbits, but we actually have a free range rabbit running around our house right now, It's quite adorable, he's got his own litter box, people think that's crazy, but that's a lot of fun. Anyway, I digress. But, so cats and dogs, upwards of 50 percent of them. So if you've been licked in the face, then it's very likely that you have Bartonella. But it's also important to remember that we get Bartonella in a lot of different ways.

So anything that takes a blood meal now is the latest research. It doesn't have to be just a tick. It can be a mosquito, it can be a biting fly, sandfly, chigger, a whole number of different things. You can get it passed down through the placenta from mother to child. You can have it through kissing other people, sexual contact. So there's just lots of different ways that we can get Bartonella.

But to come back to your original question, that's the connection there with our animals. So, I'll be cuddling with my cat, cat will be licking me and I'll say, oh, my Bartonella baby, don't give me Bartonella again. So it's really interesting to see that sometimes people will get animals and their health goes downhill after that. So they have to pay attention to that. And we don't necessarily need to say that you have to get rid of your animals, sometimes we do, but there are things that you can do then, to help out your animal as well as help out yourself.

Because whether, you want to make sure that you're not, while you're going through treatment, that you're not continuously being exposed. And this is the same thing for couples, for people who are intimate. You're giving it back and forth to each other. You want to make sure both people are being treated. Sometimes the kids need to be treated and sometimes the animals need to be treated.

Kirsty Cullen

And it's also, I guess, a question beyond exposure of susceptibility, isn't it? Because we've got to consider what the other risk factors are that already exist in terms of pre-existing inflammation or adrenal pressure. Can you say a little bit about the type of system that's going to be more susceptible to these infections?

Dr. Evan Hirsch - [00:23:45]

Absolutely, because I believe that most of us have Bartonella and a number of these other infections, maybe 90, 95 percent of us. We have to remember that in this human form, we're 90 percent bug cells and 10 percent human cells, so we have this balance. But what ends up happening is a number of stressful events, whether it's mental emotional, like a breakup or a challenging relationship or some sort of emotional trauma or whether it's physical, like a car accident or any of these toxicities, heavy metals, chemicals, molds, other infections that end up taking that immune system, sending it off into left field, and then all of a sudden these infections become opportunistic.

And this is exactly what we're also seeing in COVID-19 and with long haulers, it's the same sort of idea, where the people who are predisposed have more of those causes and more severe ones and that predisposes them.

Kirsty Cullen

And Evan I'm really interested for you to explain a little bit more about the whack-a-mole effect as it's sounds a lot of fun but actually, in reality, it's just not, is it?

Dr. Evan Hirsch

It's not. But it's also really exciting. So the whack-a-mole, when you've been to the local fair is you hit, I don't know if they've got the same thing in the U.K. and abroad, but you hit a mole, another one pops up and you're trying to hit them as fast as you can. So what I have found, and once again, serendipity right, where I was treating somebody for Bartonella and all of a sudden they started to get negative symptoms and it didn't sound like Bartonella die off.

And so I was like, this sounds like Babesia. I was like, maybe Babesia is coming out. And so I started treating for Babesia and sure enough, the individual got better and the symptoms got better. And so what I found is that, this is really common, where you go after one infection and oftentimes that will cause another infection to pop out. And then you apply a tincture, or whatever we're using in order to keep that infection in check, and then you continue on and usually it's two or three, generally it's just the big two, the Bartonella and the Babesia, but sometimes Borrelia or Anaplasma or Epstein-Barr virus will pop out, but usually just Bartonella and Babesia, where you're kind of playing this whack-a-mole game. As you're ramping up on one of them, sometimes the other one pops out and then you need to ramp up on your treatment for that one as well.

Kirsty Cullen

So I guess in that case, it's quite crucial, clinically for practitioners to really be aware of typical symptom clusters and maybe where there's a shift in focus required.

Dr. Evan Hirsch

Absolutely, yeah, that is key. And you have to have access to that practitioner and that's really important. Because a lot of providers are, sometimes, and this is really unfortunate, even if they're the absolute best functional medicine practitioner who specializes in exactly what you have going on, sometimes you're only seeing them once every three months and they're not very accessible in between times.

So you have to make sure that you have access, on relatively daily basis, as things pop up. How are you going to get the support that you need in order to go to the next step. Because this process really is five steps forward, one step back. And you have to make sure that when you have that step back, that you can pivot and get the information you need so that you can get back to going forward.

Kirsty Cullen

Absolutely. Actually, that's a really important point, isn't it? Because we may have a case where, OK, we've got, either a positive test result or we've got symptoms suggestive of an infection, and actually

the road ahead can then be quite a long one. In the midterm how do you prepare your patients for the work ahead, in terms of what they might expect to see? Die off, herxheimer reactions, energy levels and what this process is actually going to look like?

Dr. Evan Hirsch - [00:27:50]

Yeah, so we do the best that we can at creating real expectations, because that's the understanding, that's what people need to understand in order to be successful in the program. Slow and steady wins the race.

But as humans, we are so much in a rush to get better right away. I find that I say that all the time. Slow and steady wins the race, you have to pay attention to your symptoms, we have to pivot, whatever it is, we're going to get there. The question is just how many pivots does it take?

So it takes the patience and it takes the gratitude of where you are in this moment. But then it also takes continuing to move forward, making sure that if you have a question, you ask it, because I don't know what's going on for you unless you tell me. So that's a huge part of this process. And that's why we've built so much support in the program moving forward so that you can get your questions answered on a day to day basis.

Kirsty Cullen

And Evan, how do you delineate between cases where, actually the key requirement is really good immune support, support for natural killer cells, support for the gut. And where in other cases there's actually an additional requirement there, which is looking at the addition of antiviral, antibacterial support. Is it always a case of using all the tools in the armory or is sometimes it as simple as supporting immune and gut function?

Dr. Evan Hirsch

That's a good question. Gut function, everybody needs, everybody needs support with gut function, but in terms of immune support, you raise a very interesting question, because oftentimes what we're looking to do is balance out the immune system. Everybody who has ME/CFS has immune system hyperactivity. They have autoimmunity on some level, the immune system is out of balance. We've got this Th1 and this Th2 aspect and Th1 is all wonky and hyperactive or Th2 is all wonky and hyperactive. So it's more about bringing the immune system back into balance. It's removing foods out of your diet that are toxic, removing inhaled antigens that are toxic, that are causing your immune system to be more reactive and then removing all of those toxicities that I mentioned.

So for me, it's less about boosting the immune system, more about balancing. Using things like vitamin D and fish oils and glutathione, which are going to balance those, as opposed to mushrooms, which also, there's a question about utilizing those in the context of a moldy environment and mold mycotoxins being in the body as well. So that's my take on it.

But we always also want to heal the gut. But I do find that oftentimes these infections, these co-infections are oftentimes in the gut as well. 80 percent of the immune system is in the gut, it's going to react to all of these different things. Sometimes it's not just a bacteria or a worm or a fungus that's in the gut. Oftentimes, it may be one of these parasites, one of these protozoa, one of these co-infections. And sometimes, so I see sometimes clinicians are spending so much time on the gut that 12 months later they haven't even addressed co-infections. And you start going after the co-infections and then all of a sudden the gut issues go away, the abdominal pain, the diarrhea, whatever it is.

So that's an important point to remember as well, is that sometimes we are using certain things to heal the gut, but we have to look at what the biggest bang is for the buck. Is it how much time do we actually spend on healing the gut when we know that by going after some of these environmental toxins, the heavy metals, chemicals, molds, infections, that those are going to fix 75 percent of the gut

problem? How much money and how much time do we spend on the gut? Now, I'm not saying don't do diet. We always do diet. But in terms of like supplements.

Kirsty Cullen - [00:31:59]

I completely agree, so it's where the art meets the science, isn't it? In a sense, it's kind of getting that ordering in the right position to start to make an impact.

I'm also really interested to know, from a testing perspective Evan, where you sit? Because obviously not everyone can afford testing. So how often do you find yourself testing versus considering the clinical picture and the symptoms as a lead in what you're going to do next?

Dr. Evan Hirsch

Symptoms are always the lead. Even when I was in medical school, 90 percent, we were taught 90 percent of your diagnosis is going to be history and symptoms, five percent is going to be labs and five percent is going to be physical exam.

So labs and physical exam are just a lot less important. So, as I mentioned, 75 percent of these causes can actually be determined by symptoms. So that's what we do first, and that's most important. But then there are certain things that really require labs. Heavy metals, chemicals and molds, mycotoxins. So those really are, that's really where you should be spending your money.

I tell people if there's one lab that you really need to get, it's the ERMI Lab, E-R-M-I, Environmental Relative Moldiness Index and it's to determine whether or not you're living in mold. It's a DNA test for mold.

So that is, and that's dives into, who can't we help? And it's really people who are living in mold who don't know it or can't get out of it. That's like one of the biggest things and one of the biggest challenges. That is the number one lab test that I recommend that people get if their budget is tiny. But there are a couple of those that you can also get if you want to expand on that. But you don't need so many of these other ones. You can do them to confirm certain things. But all lab tests are imperfect. And we really want to combine all of the data that we have in order to be most successful.

Kirsty Cullen

And you mentioned mold there, and I'm assuming that's because when someone's still living in that environmental situation, that mold, the mycotoxins are going to have such an impact, negative impact on their immune system, that it becomes very hard then to position a body to fight co-infections. Is that what we're saying?

Dr. Evan Hirsch

Absolutely, and there have been studies to show that. And when you remove mold, you're a lot more successful at getting rid of infections. And you're just going to do yourself a service by making sure that you're not living in mold and if you are living in mold, that you're remediating it. And you don't have to necessarily spend tens of thousands of dollars remediating, there are a number of tools that you can do in order to improve the quality of the air in your home while at the same time, getting rid of the mold out of your body.

Kirsty Cullen

And what's the reality in a case where infections have perhaps been chronic, so they've been present for many years? Does that impact on the recovery period versus someone who's maybe had more of a recent exposure?

Dr. Evan Hirsch - [00:35:04]

Absolutely, yeah, it depends on how deep the infection is, how many of the other causes there are. Generally we're looking at a timeline of somewhere between 6 and 12 months to get somebody to 80, 90, 100 percent better.

But for some people, it may be 3 years, depending on how sensitive they are, in terms of their ability to take supplements, if they are more reactive, if we have problems with step three and opening up the detoxification pathways, if you have multiple infections and they're at deeper levels, so it can definitely take more time. But when you have to, you know that you're on the right track, when you're evaluating as many causes as possible. So you always want to come back to that and you always want to be like, OK, because if you don't know what causes you have, you're never going to be successful.

Some of these shotgun approaches like IV Vitamin C and IV ozone and a number, hyperbaric oxygen, they can help, but they're arbitrary. They're not discerning. And they may cause a whole bunch more die off than you're anticipating because they're going after bugs, where the time is not right for them to go after. So you just have to be careful with some of the more global treatments and get really specific about which causes you have.

Kirsty Cullen

And that leads me very nicely to what are some of your favorite tools in working with patients with co-infections?

Dr. Evan Hirsch

So, I would say that, so herbs are my primary form of support. And so there's a number of different brands that I like to use. Byron White Formulas are some of my favorite. I've seen the most transformation with those. Nutramedix products is what we use a lot with our international folks because they can't get access to the Byron White Formulas. The Beyond Balance products are quite good. So those are the main ones that we're using.

But yeah, we are using supplements, lifestyle habit change, behavioral modification, we do a lot of work with mindset, limbic system retraining, we have a nervous system coach on staff, we have a health coach on staff that helps to guide people through the program. So there's, you have to come at it from all of those different aspects in order to be most successful from what I've found.

Kirsty Cullen

So it's definitely a complex interplay and patience is key, isn't it? As well as that good relationship with your practitioner, as you've already said, because that's going to be essential to kind of navigating through those months of work.

Dr. Evan Hirsch

Right. Agreed.

Kirsty Cullen

Evan it's been fascinating. So if people want to know a little bit more about your work, where can they go to read a little more?

Dr. Evan Hirsch

We are at <u>fixyourfatigue.com</u>. And you can check out all the free stuff that we have. If you're interested in getting on a call with us to go deeper. We're open to that as well.

Kirsty Cullen

Wonderful. Evan, thank you so much for your time. It is hugely appreciated.

Dr. Evan Hirsch

Thank you, Kristy. This was a lot of fun.