Introduction to Immunotherapy

Welcome to Mold, Mycotoxin, and Chronic Illness Summit. I'm your host Dr. Ann Shippy and today we get to speak with Darin Ingels. He's a licensed naturopathic doctor, author, international speaker and a leading authority on Lyme disease and immunotherapy, as well as mycotoxin illness.

So today, we're really going to get to focus on the immunotherapy aspect of helping people recover from chronic illnesses. Thanks so much for joining us today.

Oh, my absolute pleasure. Thank you. Yeah, you've got such a wealth of knowledge. And I. I think that this is a really important piece to cover in the summit and nobody else has really talked about it, which is really how do we help the immune system?

You know, what are what's another way to help the immune system get back on track? And so I know that you've got quite an expertise in immunotherapy. So I would love for you to just start out by explaining what that is.

Well, you know, immunotherapy is really a very broad category and it applies to a lot of different aspects of medicine. I mean, you'll hear about immunotherapy for cancer treatment.

You hear about immunotherapy for people that have like true immune deficiencies. But in this case, we're talking about immune therapy to modulate your immune system against anything that might be provoking a reaction.

And particularly when we talk about, you know, allergies or hypersensitivity is mast cell activation, and that can be caused by any number, of course, different triggers.

And I think, you know, the beauty of immunotherapy that as a whole, you know, we have a tool actually tools that we can use to not only stop the type of reaction that you're having, but I hate to use the C word, but maybe even cure the problem.

You know, we never used that word in medicine, right? It's like nobody ever wants to talk about actually legit fixing a problem. But I think that's the beauty of immunotherapy is that we've got a way that we can manipulate your immune system in a positive way.

And if you think about allergies as a whole, they're really overreactions of your immune system, your immune systems, not recognizing necessarily what's part of you, what's not part of you.

And we get this element of immune confusion. I mean, that's really what autoimmune disease is, right? So if there's a way, again, that we can retrain the immune system to not be so overreactive, start to differentiate what's part of you, what's not part of you, you know, then we have these incredibly powerful tools at our fingertips that, you know, again, are going to get people over that hump.

And, you know, of course, you know, the the topic that's, you know, covering in your summit here, you know, with mold and mycotoxins, you know, both mold spores and mycotoxins, those chemicals can be immune triggers.

So, you know, I've been using immunotherapy for almost 25 years in my practice, and I find it an invaluable tool in really helping people get get better and permanently.

I love that. So can you elaborate a little bit more onwhy this is important with mold and mycotoxin illness? We've we've done a lot of focus on the toxicity side of thing and and less on the allergy side of things, but I think it's really helpful to address both at the same time.

Absolutely. And, you know, I think a lot of focus gets into the Mycotoxins part just because of what it does to the body. I mean, these chemicals are so harmful, they can directly damage your brain, your neurons, your respiratory tract.

But mold allergy is actually far more common.

Mold Allergy vs Mycotoxin Illness

And you can have both problems and clinically, the symptoms of mycotoxins the and mold allergy can overlap. I mean, as a patient and you and I as doctors, we would have a hard time distinguishing if someone's actually having an allergic reaction to a mold spore or are they having a chemical effect of the mycotoxins.

And my experience is such that a lot of people who've been in water damaged buildings have had that mycotoxins exposure. More often than not, they get sensitized to mold spores.

So now every time they go out on a humid day in Austin, you know, when the humidity is high, the mold spores are very high. You know, people feel those symptoms.

They feel the head pressure, they feel the brain fog, they feel the congestion. They feel that tightness in their chest and they go, wait a second. You know, I know that my home has problems.

I should feel better when I'm outside or I should feel when I get better when I go to a different environment and they don't necessarily feel better. Why is that?

Well, again, any time there's mold spores in the air, that can be an immune trigger to set the immune system off. So, you know, I want to really emphasize that mold allergy is incredibly common.

And what complicates this a bit further, if you go to the doctor and you get tested for mold, allergy, you know, when we think about allergy as a whole, we typically think about these reactions that are mediated by immunoglobulinE or IGE and that IGE molecule is ultimately what binds to mast cells.

The mast cells, you know, pop their balloon, release all their granules, including histamine and about 200 other chemicals. And that's what triggers a lot of the symptoms.

But in the case of mold, a lot of mold Allergy doesn't involve IGE at all. And therefore, if you go to the allergist, you get skin prick testing, or if you do a blood test called a RAST test RSV, you might find that there's no IGE antibodies.

And so the doctor says, well, you're not allergic to mold spores. And you go, Yeah, okay. But every time I go into a damp basement, every time it rains, every time I'm in hot, humid weather, I feel the effects of it.

And that's sort of a clinical indication that, you know, you're probably allergic to mold spores. So sometimes, you know, we have to do different times of testing to help identify if somebody is having allergy to mold.

You know, maybe it's IgG, maybe it's T cell mediated. But when we find that people do have that reaction and we start implementing immunotherapy again, I find a lot of my patients do really well with it.

So I to find that measuring that a lot of times I will check the E level just total to see if sure upregulated. I really don't prefer the rest testing, but I do like to measure the IGA, IGE IgG levels to mold in certain circumstances that tell me a little bit more about how you approach that.

And sometimes the T cells. Are there particular laboratories that you like or do you just use the some of the traditional labs or what's your approach with the testing side of things?

Yeah. So, you know, I'm an environmental medicine doctor by training, so we'll use different types of skin

techniques. No one's called serial endpoint titration where when you go to a regular allergist, they just put a needle in your skin and you'll put a little bit of the antigen and you just see if you get a histamine reaction.

Well, in serial endpoint titration, you can actually start injecting different it's a little intradermal injection in you do different dilutions and sometimes you might find one dilution doesn't provoke a reaction, but a stronger dilution does.

So it's a far more accurate method of helping identify that sensitivity because, you know, even between different mold species, there can be different sensitivities.

You could be highly allergic to Aspergillus and maybe not so much to cloud as barium. So because there's so many different mold species out there in the world, you know, you have to look at them kind of as individuals.

I think we want to kind of lump it all together. And again, when you look at what's available through blood testing like RAST testing or even what the allergist does with skin prick testing, they might do the top four or five molds that are common, but there's dozens of mold species that can provoke reactions.

So it may also be a function that they're just not looking at the right stuff. So is it they're not looking at the right stuff? Is it just it's a different immune mechanism.

So I find is a much more reliable method for identifying mold. And again, if you get in touch with environmental medicine, a lot of these doctors know how to do that technique.

And again, if you get a hit on blood testing or if you get in on a positive, you know, skin pretest grade, I mean, that's information to help identify what you're reacting to.

But again, if you've got a negative rash test, negative skin prick test, that doesn't necessarily exclude the possibility of having an immune reaction.

And what I find to maybe you find this as well, is sometimes people are just so used to their allergy level, like they just have the chronic during the day and they don't even realize that they're having it or they just have no symptoms at all.

But still, that immune system is just so upregulated from an allergy sense. So the testing really helps to to detect it, right? Well, and what's important too is depending on what kind of immunotherapy you might be considering as part of treatment, you know, you might need to know exactly what specific allergen you have, because that's going to dictate what's part of your treatment.

You know, same thing. If you go to the allergist and they do skin testing, they find out, okay, you're allergic to Aspergillus and Penicillium. Well, when they give you your allergy shot, that's what they're going to put in the shot.

They're only going to put in there what they know. You're actually allergic or sensitive to. So if we don't know what you're reacting to, it's hard to customize that formula to you.

So with, you know, one type of immunotherapy, which I'm sure we'll talk about in a little bit, it's highly, highly specific to the individual. And so we only put in exactly what we know you're reactive to.

And then there's another technique we can talk about that's not as specific. That kind of doesn't matter what you're testing shows, you can still use any way.

Testing for Mold Sensitivity

So, you know, the other good thing is we have a lot of options when it comes to immunotherapy to really find out what works best for you. This is so great.

So I'm curious, as you're talking so many questions for you, but one of them is whether you see correlations with other environmental toxins. So like when you see the immune system rubbed up to some molds, do are you testing for other environmental toxins as well?

Absolutely. Because again, you know, we tend to think of allergy or reactivity in these kind of segments maybe for our ease of understanding. But the reality is your immune system is one big blob, right?

It's reacting to mold and pollen and dust and cat and dog and food and and chemicals and everything. And you have to multitask so. Well. Yeah. So, you know, we have to go through that checklist.

And again, a lot of it's given by your history. You know what are the kind of things that we can identify, you know, for something like mold? More often than not, we might see a seasonal pattern to it, you know, particular if you do live in parts of the world where there is a lot of humidity, that tends to be when the mold is at its highest.

You know, pollen very much has a season to it. So if you live in the East Coast where there's no pollen in the wintertime, it's very easy to, you know, every time when April May rolls around, I get itchy, I blow up.

Okay. We have clues that, you know, pollen is part of your trigger. So is it important to test during the highest seasons for the things or does it is there enough?

What does it mean? Not necessarily. Yeah. Usually there's enough memory. Although if you were to track, particularly with pollen in areas where it is seasonal and I live in California where we pollinate just about year round, but in areas that do have a seasonal variation, if you were to test in the dead of winter versus the peak like tree pollen season, April May, you would probably see differing levels of IgG, but it would still be there.

It's not like it's going to go away completely in the off season and then come roaring back. So it's always helpful if you can get in the peak of the season, but it certainly isn't essential and I think if someone truly is allergic in that way, you'll still pick it up on your testing.

So let's get into how immunotherapy actually helps the body and improves symptoms. Well, it's interesting. You know, immunotherapy has been used for literally over a hundred years.

This is nothing new. And it's used a little bit differently around the world. But the idea behind it is we are trying to rebuild immune tolerance. Again, allergy at its core or hypersensitivity is essentially loss of immune tolerance, your immune system's ability to discriminate what is and is not part of your world for some reason is damaged.

And I think what's really fascinating is that I don't think we really understand the mechanism of why people become sensitive to anything. No. Why are some people allergic to dogs and cats and other people are?

And what are some people allergic to ragweed? What is it that sensitizes us? Again, I don't think we fully understand it, but what's really interesting is if you look at animal studies, if you wanted to study how a different allergen bothers someone, the way they sensitize, you know, mice and rats is they'll scratch their skin, they'll break the skin, they'll introduce the antigens through the skin.

And that's what sensitizes them to whatever you want to test. So it kind of makes me wonder, you know, how much of our sensitization isn't necessarily coming from what we're breathing in, but maybe what we're touching and, you know, how much of this also goes back to what happens very early in life?

You know, from the time we're born and what we get exposed to, I'm sure we're going to find in time there's numerous factors that contribute to that. But nonetheless, once that process happens and you are sensitized now, we've got to again turn off that mechanism to retrain the immune system to not be so hypersensitive.

And we know a lot of these reactions are really driven by what's called th2 or t helper cell two. So t helper cells, for those of you who don't know, are basically the conductors of your immune system.

T help ourselves kind of direct what your body should and should not be reacting to. And there are different t h types t helper types, but we talk a lot about th1 and two t helper one cells are really kind of your direct scavengers of your immune system.

So they'll see something that's foreign, they'll go right after it and get rid of it. Where th2 cells don't do that. They kind of the ones that stand here and go, Hey, the immune system, there's a problem over here.

Somebody needs to do something about it. And so a lot of that is helping stimulate B cells which make antibodies. So when you're you know, we think about take one and to kind of being like a seesaw, we want them to be relatively balanced.

But what happens if you start to become more dominant and one, those cells secrete chemicals that suppress the other side. So if you're th1 dominant, it's going to suppress th2.

If you are th2 dominant, it's going to suppress th1. So you can imagine the scenario here that a lot of allergy and even autoimmunity is t H2 driven. Well, if that part goes up, it's now suppressing th1.

Well wait, that's the direct scavenger of my immune system. Isn't that going to make me immune compromised. And potentially it could. You know, for years and years we really had no way of measuring th1 and two.

And now we do have a lab psi rex labs that does directly measure th1 and t h to cells. So we can now test for that directly and find out if, you know, you really are having that imbalance.

But ultimately the goal is, no, we're trying to get that seesaw more balanced. Again, it's horribly, horribly. Just abbreviated, concise, clear explanation that I've heard yet on.

That's a great job. And I think it's just so clear now what those important parts of the immune system are doing and then why it's so important to balance and so.

Damon Yeah, well, again, ultimately we want to, you know, we want to get that overexpression of T to back down.

How Immunotherapy Rebuilds Tolerance

And again, you know, it can happen with any common allergen, you know, like mold spores, but it can be driven by pathogens, too. We know that, you know, Lyme disease and Bartonella and viruses and COVID and all these things can, you know, set the stage where it's overstimulating that part of the immune system.

So, you know, one of the immunotherapy techniques that we use, it's called LDI or low dose immunotherapy that's directed towards the pathogen. So we know that, you know, strep has been associated with causing rheumatic fever, rheumatic heart disease.

It is an autoimmune reaction to strep. Your immune systems treating strep like an allergen, not as a pathogen. It engages the wrong part of the immune system.

So we've got mechanisms that we can kind of turn those reactions off. So again, I just want to kind of paint a picture of that now when we are able to identify what those triggers are, you know, we've got to get a lot of possibilities of using immunotherapy to downregulate that immune response.

Beautiful. So that's LDI. Yes. Okay. Can you say a little bit more about that, like what the process actually is? Yeah. So well, maybe just let me give you an overview of immunotherapy as a whole.

I think that that might set the stage. So in our practice, there's really three types of immunotherapy that we use. I won't really talk much about allergy shots.

That's what a conventional allergist would do. So again, if you do the skin prick testing, they find out you're allergic

to dust or ragweed. You come in every week, they inject you with dust and ragweed.

And over time they keep building the concentration as your tolerance gets better. And then you eventually get to a point where you're kind of at a maintenance dose, and that's what you stay on often for many, many years.

And that's what a conventional ours does, and that's pretty much it. But the other options we have is ones called sublingual immunotherapy. Sublingual means under your tongue.

So the concept is very much like allergy shots, and the testing we do can be very similar. Again, we could do skin protesting, we could do blood testing, we could do testing.

And based on that, we will compile, you know, whatever allergens we need in a bottle. And instead of injecting it, you just put these drops under your tongue.

The way all immunotherapy works, at least with regards to allergy, is through these cells called dendritic cells. And dendritic cells are part of your immune system and they are in your skin, which is why allergies like to do the injections.

But they're also very rich in your mouth and under your tongue. So whether you put that allergen under your tongue or inject it to your skin, the mechanism is really the same.

It's just another way to to confer immunity through those dendritic cells. So, you know, again, what we don't really understand is like, well, wait a second.

This is the thing that bothers me. This is the thing that's a trigger. Why on earth can I injected or put it on my tongue? And it doesn't make me worse.

If you can figure that out, please let me know. We'll win the Nobel Prize in medicine together. All we know is that at the right concentration, at the very specific concentration, instead of your immune system overreacting, it starts to get retrained to not react.

So, you know, the the power and this is really the dose, the concentration. And, you know, because everyone's individual, it gives us a lot of flexibility to play around with that dose, to play around with that concentration, to find out exactly what you need.

Now, when we do serial endpoint titration, we find out exactly what dose someone needs to neutralize their immune system. So we're looking for that neutralizing dose that's going to start blocking that immune response.

And then again, over time, we keep increasing that dose as we feel like people's immune system tolerates. So sublingual immunotherapy we can do for, you know, mold and pollen and animals and chemicals and other things.

The only time we don't really do sublingual immunotherapy is we don't do it for people that have legitimate anaphylactic food reactions. It's just there's very little research out there on that specific case.

There is a potential to trigger the reaction because we are putting it under the tongue. So there's different ways of dealing with that. But pretty much any other type of like food sensitivity, the ones that are nuisances but aren't dangerous, then sublingual immunotherapy works really well.

The other thing you can. Do it at home rather than running into that. Right? So it gives people that flexibility that you do it at home. Again, it's very safe.

There are literally over a thousand studies on sublingual immunotherapy. This has been used for over 100 years. It's widely used throughout Europe. Actually.

They've done studies looking at the cost of allergy shots and the cost of sublingual immunotherapy. Sublingual

immunotherapy is literally a quarter of the cost of doing allergy shots.

And since most of Europe is socialized medicine, they want to save money, but the United States allergist get reimbursed for doing allergy shots. So you'll get a kick out of this in the early nineties, I was a chemical engineer for IBM.

I got really sick and when I couldn't get help from any of the physicians that I went to to figure out what was happening, but I did end up finding an allergist.

There was like an hour and a half drive from me that I went to and I did the the sublingual therapy because I was just allergic to pretty much every food.

And it really made a huge difference. Then, of course, I wasn't going to be able to drive an hour and a half regularly to do any other type of therapy, but he had an incredible practice and was really on the forefront with this.

Yeah, said it's such a great therapy. And again, they've done studies in children, they've done studies adults. So this really applies to any age group and there's very few contraindications to doing sublingual immunotherapy.

But again, I like the ability people being able to administer it at home just for the convenience, the safety profiles. Excellent. There's very rare, rare cases of people having anaphylactic reactions to sublingual. I've only read of three cases and they were all related to pollen specifically.

So it's incredibly rare. And so again, it's just a great tool to have The other type of immunotherapy that I think is really neat is called Elda Low Dose Allergy Therapy, and LDA was actually developed in the 1960s by a doctor out of the UK.

He was an EMT surgeon, Dr. Len McEwen, and he really discovered by accident, and I won't go into the whole story that if you really dilute out these antigens a lot way more than what conventional allergies do, and you mix it with an enzyme called beta glucan on a day, and this enzyme's naturally found in your white blood cells.

That combination seems to help modulate your immune system again, about whatever you mix with that enzyme. And so, you know, again, he started treating people for food allergies and environmental allergies.

Sublingual Immunotherapy and LDA

And with LDA, the way it's traditionally taught is you do it as a intradermal injection. So it just goes between the layers of the skin. But what's neat is that you only get a dose every seven weeks.

So unlike allergy shots that start as weekly or even sublingual, that's daily, this you only get every seven weeks. And what we've kind of learned over time is, again, for the mechanism already described, you know, you can put it under the tongue as well.

So the downside to the shot is it really stings. I've had it done. It's like getting stung by 100 bees. It's not very comfortable. It only lasts about 30 seconds, but it's.

Just that because of the beta click, you're on it. Maybe. You know, I don't know if it's the enzyme or the extract or a little bit of both. But, you know, you only put just a tiny amount in.

But that little tiny amount really doesn't feel very good. But, you know, this is the way it's been done for 60 years. It's very effective. But in our practice, we've kind of migrated.

A lot of our patients are just doing it under the tongue. Get I read a lot of kids in my practice. They would never tolerate the injection, the sting would hurt too much and they would never come back and see me.

And clinically we find that the tongue works again really well for a lot of people. And the fact, again, that you only

need it every seven weeks for people who are so used to taking so many supplements and pills daily, this is pretty nice that basically it's almost every two months.

So you say even with the sublingual, they only need it every seven weeks. With LDA? Yeah, with lda it's every seven weeks. So really the big difference, the goal is exactly the same.

Again, we're just trying to build immune tolerance to these different allergens. So with LDA, there are, there's technically four mixes, there's two different food mixes.

It's the same number of foods, but they're in slightly different concentrations. There's an inhalant mix which has mold and pollen and cat and dust and dog and feather and pretty much anything you breathe in.

And then there's also a chemical mix. So it's got formaldehyde in petroleum in a lot of the common things that that trigger people. And of course, you and I work with so many people who are not only mold sensitive, but chemically sensitive and again, you go to the allergist and say, I'm chemically sensitive.

You know, they're going to look at you like you got three heads and go, okay, so here's a way, again that we can actually treat people for those chemical sensitivities to those those different triggers.

So, you know, we start people usually with the lower dose of the food mix, the inhalants and the chemicals, again, every seven weeks. And then after they've had a few doses, we can move them up and give them the stronger food mix.

And is there a mold next for it to sorry, is there also a mold mix? So the mold mixes in the inhale and exhale. It's okay. Yeah. So the idea behind LDA and with LDA, there's really no testing involved or it doesn't have to be involved.

And the idea behind it is know the food mix has about 70 different foods in it. The inhalant mix is about the same, and the chemical mix is only about four or five different chemicals.

But, you know, if you're there's something in that mix that you're allergic or sensitive to, you know, we're covering the bases. And if you're not allergic or sensitive to it, who cares because you're not allergic or sensitive.

So we're not going to harm you by giving you something in that mix that you're not reacting to. That's a low dose because it's such a it's exactly still okay.

Yeah. So, you know, I like this therapy again. The fact that it's been around for 60 plus years, it's got a long clinical use. Unfortunately, there's no real research on this.

You know, there's no money to be made by doing large scale studies. But now that we've got, you know, hundreds, if not thousands of doctors around the world of uses therapy for 60 years, again, very, very safe, very well tolerated.

So I like this for people who maybe can't do sublingual immunotherapy for whatever reason. I like this for kids just because it's safe, It's really convenient.

And again, it's not something you have to do every day. So, you know, this is just the conversation we have with our patients on, you know, what fits your world best.

What do we think is going to be the best option? And the nice thing, too, is that, you know, we're not married to any one thing. If we start down one path and we don't feel like we're getting the kind of results we want, we have these other options to try.

So how long does it take for people to start to notice a difference after starting the treatment? That's a great question and everyone's different. My experience with sublingual immunotherapy as a whole, most people start to

feel the difference somewhere between four and eight weeks after starting treatment, we start to see something change.

With LDA, it can be a little different sometimes. It's not really until the third or fourth dose that people feel the difference. So it could be six months, eight months or longer.

So that's really kind of the big distinguishing things that I tell people about between LDA and Sublingual immunotherapy is time. You know, sublingual immunotherapy for most people does work a lot faster.

It's just there's a little bit more involved because you need to go through the process of testing. This is something you need to do daily for most people where LDA is like, well, we don't really need to test you.

It's just based on your history and you only need us every seven weeks. And what about cost between the two options? So there's a little bit more upfront costs with sublingual because you need the testing.

You know, we got to find out what your reactive to. So you know with and fortunately insurance doesn't pay for that of course so that's an out-of-pocket expense.

But once we've done the testing we've established what your sense of two we don't really have to go back and keep redoing all that testing. So that's sort of a one time upfront expense.

And then the cost of sublingual immunotherapy versus LDA, it really kind of depends on how many things you're allergic are sensitive to. With sublingual immunotherapy, we can mix certain things together in the same bottle and other things we really can't.

All of these extracts have enzymes in it, and if you mix the wrong things, they kind of degrade themselves in the bottle and they sort of weaken themselves.

So like if you're allergic to ten pollens, I can put all the pollens together in one bottle. If you're allergic to eight molds, I can put all my molds together.

But we don't mix mold and pollen. I don't mix pollen and dust. I don't mix dust in food. So if you've got a lot of sensitivities, you can have four or five, six, seven bottles.

That's going to be a lot more expensive than just doing lda. But if you only have, you know, a couple of things, you've only got two bottles or three bottles, the cost may be kind of a wash.

Okay, that's super helpful. So I know you're doing a lot with your patients and it's a very integrative, functional approach. So how does the immunotherapy fit in with the other things that you do to help your patients heal?

Well, again, it's just a tool in the toolbox. I think, you know, we're looking at the whole person. So, you know, we're looking still at the mycotoxin part and we're doing all the things to try and help mobilize mycotoxins out of tissue.

We're doing some element of detox to help mobilize all the other toxins. And then we're doing the sauna, we're doing the wood of iron, you know, we're doing the diet gut health.

You know, we got to do all the things that we know impact your immune system and diet and gut are just so critically important since, you know, up to 80% of your immune function stems from the gut.

If you've got an unhealthy gut, you're going to have a lot of trouble with your immune system. And we've got so much research going on, and I'm sure you probably talked to other people in the summit about this, that, you know, these changes in the microbiome are really addicting and maybe even predicting how people are going to respond with different types of, you know, illnesses.

I mean, I have an autoimmune disease and I seen all the research coming out that there's a very specific change in

the gut microbiome and very specific strains are out of balance.

So as much as we can help, you know, get the gut under control, I think that's going to really help, again, lower that immune load and reduce that risk of having any kind of autoimmune reaction.

So if we want to really lower that to too, we need to make sure that the God's really working well. So again, you know, I know we're just talking about immunotherapy, but.

But we're so in line here and it's it's great how it all fits together. Right? If they get soft, the whole immune system's going to be off. So it's a really important piece of the puzzle.

Yeah, absolutely. Yeah. So I, I know on the personal front that a lot of your learnings like you learned a lot from helping but hundreds or thousands of patients but that a lot of your learnings actually come from what it took to heal your own body.

So I'd love if we could just spend a little bit of time sharing about you because I think it'll really give people hope about how sure you can get but then still heal.

So if you want to I know you've had at least two major crises. The first the first being line. We want to share a little bit about that. And the key thing, it took you to recover from that.

Be great. Yeah. Well, I moved to Connecticut after residency and about two weeks before I opened my own practice, I got bit by a tick and I got classic Lyme disease.

Integrating Treatment with Gut and Detox Support

I had the bullseye rash, 105 fever, joint pain, neuropathy, the whole gamut. And I got treated with Doxy cycling right away, and four days later I felt great.

But, you know, eight months into owning my new business and working seven days a week, you know, eight, ten, 12 hours a day, I started to relapse and went back on doxycycline and did nothing, switch to a zipper, Amazon did nothing.

And then I started cycling through the litany of, you know, oral antibiotics for nine months and got a lot worse. And I was fortunate to have found a doctor in New York City named Dr.

Zhang, and he treated me with Chinese herbs. And a lot of it was sort of a wakeup call that everything, of course, I've been telling my patients to do, like, you need to get good sleep, you need to eat.

Well, I wasn't following my own advice, so it was the wakeup call with the Chinese herbs. And then about a month into that, I felt 80, 85% better. But it still took another two, almost three years of really getting to a point where I feel like I got my health back.

And I was actually doing quite well for about a decade. And then I started getting symptoms again and I'm like, okay, you know, I was going through a lot of stress at the time and thought I was having a relapse of Lyme disease.

And to make a very long story short, I was diagnosed with multiple sclerosis. So I'm sure Lyme at that stage and again, I can go back and just my own history, you know, as a child.

I mean, I was on antibiotics every month. I was born till I was about five years old because I had so many ear infections and tonsillitis and of having my tubes no, have tubes put in had my tonsils taken out.

I was never breastfed. I was bottle feds. I think it was just a lot of things that set my gut microbiome up from an early stage that I think translated to problems year later, years later.

So and then to kind of cap all this off, January of this year, we found out we had a terrible mold situation in our office to the point where we had to evacuate within a week.

I had two mold inspectors come in, said, This is dangerous, you need to leave. So I'm sure sitting in toxic mold for God knows how long certainly didn't help our mess at all.

So we're out of that environment and we're still looking for a new cleaner office, which I come to find is a huge problem in California. But yeah, through my own process, you know, Lyme and then dealing with that mess, you know, it's, you know, when you have your own health issues, of course you dig deep and you always learn so much more.

And I've used a lot of immunotherapy for myself. I mean, I've do sublingual immunotherapy, I've done Ida, I've done Ida, I've done all these different things as a way to modulate my own immune system.

So, yeah, I'm not just a doctor, I'm a patient too. So I know what it's like to go through you know, having a chronic illness and trying to find answers.

But I want to offer hope that there's so much available. And if you've if you've gone down different paths with different practitioners and you're still struggling, you know, I like you know, Thomas Edison said it best because I found 10,000 ways not to make a light bulb.

You know, all it is is it's information. You've found things that maybe haven't worked as well for you, but that doesn't mean that there's not something out there that won't.

And you just got to keep digging and keep fighting and know this is your life, right? You got to do everything you can to heal and get well. Quite a journey.

You're you're on a curious what what gave you your clues for finding the mold in your office? How did you know to go look? Well, the fact that we had water pouring through our ceiling was probably the first dog.

You know, we had leaks in our office over the years. And but, you know, they always seem to kind of dry out quickly. And it never seemed to be much of a problem.

We had so much rain in California this winter. It got to the point where it was like leaking every single day. And we finally got the mold inspector out and they said, need to get out immediately.

And then we moved everything out. And once we started pulling the walls out, I mean, it was every toxic mold you can imagine was there. So we had a family throw out.

A slow leak that had. I think there were leaks there that we just didn't know about for years. And and again, you know, I don't consider myself someone who's very mold sensitive.

I mean, I'm not the canary in the coal mine that can walk into a room and go, oh, yeah, there's mold here. I just I don't I don't sense that. So, you know, I never felt great in the office.

But then again, how much of it's your work? Long hours or tired? You know, there's a lot of excuses of why you don't feel that way. And, you know, we spend a lot of time in our office, more time than I spend at home, at least at the time.

Darin Ingels' Personal Healing Journey

So, yeah, it just wasn't obvious until we got out that, yeah, this is a big problem. So and that's that's my continued journey of, you know, dealing with mold illness and detoxifying.

And so, you know, I do everything I know how to do to get the mold out of my system. But, you know, that's our

journey, right? Right. And the first thing starts with meeting her.

It's coming from which thing? Thank goodness it declared itself So you could could get on to finding a a clean place or figuring out how to make this one clean for you.

Hopefully our next space will be much better. Yes, it will definitely be. Has to be any key things that you've found the most helpful with with the mycotoxin illness for you?

Well, I mean, the biggest thing is, you know, get out, right? You know, you've got to get out of that environment. I I'm sure you know, we both have the same issues.

We're dealing with people that can't get out of their environment. It's just so much harder to treat and, you know, I realize how difficult it is, especially if it's your home and like, where are you going to go?

And not everyone has a place to go and just up and relocating herself is no easy task. And I mean, you know, even getting moving our office, you know, trying to find a space that we could go to on a moment's notice that we felt was clean or, you know, that's really a challenge.

But I, I just can't emphasize how important it is to find ways the best that you can to get out of that environment. It's just going to make your process go so much better because we do all of these great things to try and help get them out of tissue and, you know, desensitize you.

But if you're living in toxic soup, it's just a thousand times harder. Exactly. Exactly. And we're lucky because we're we work for ourselves. So we can move our of us if we have to.

But I know a lot of people are locked into, you know, how they make their living. And and finding it at work is it's a whole it's a whole nother ballgame.

And if you own your house, you can at least take action on it. If you're renting, that's a whole nother challenge to deal with the landlord. So we definitely understand the trials and tribulations of getting in and a clean place, but I can't emphasize it enough.

It is just foundational. Well, I've seen so many people. I'm sure you have too. It's like, no, they they leave that moldy environment. It's a come to find out that they went to another environment that was as bashed or worse than the one they just left.

And again, we see this in California a lot and maybe Texas, too. It's just the way that construction is done here. It's just they don't build houses for weather.

They just know. I think a lot of contractors just cut corners and when they're building, they throw up these track homes very quickly and it just takes one pipe that didn't get sealed properly, that starts dripping over time.

I mean, I have a patient I'm working with that lives, I'll say, a relatively brand new house. They're houses less than three years old. They've already spent $100,000 on mold remediation because they had so many leaks and so many problems and their poor little girl who at the time I said was like five years old, was busting out in hives every day.

And this poor little kid, they kept giving her all this medication and not understanding what she was reacting to. And once they finally remediated the house, the hive stopped.

You know, So, you know, so all these symptoms are just the nudging to find what's right, what's challenging me. And why things are getting upregulated and are what combination of things.

So that's a beautiful story. Unfortunately, I'm seeing the same thing with new construction. It's it's sometimes it's almost worse. And some of the, you know, houses built in the seventies and eighties.

Yeah, well, when I lived in Connecticut, my house was built in the 1940s and I got I was very hesitant about buying an older house. I kept thinking, Boy, this house is old and it's probably leaked and had issues and it ends up that house was built.

So solid and they were really built quite well at that time, at least in Connecticut. And I, you know, in the ten years I lived in that house and never had a leak, never had a mold issue.

So I kind of feel like that a lot of these older homes, I think the construction was better and but yeah, you just never know. It's it's a hard thing and. Not a test.

Yeah, just you just got to test and find out and just make sure that your your living environment's as healthy as it can be. Beautiful. Well, I love what you're doing out in the world.

You're helping so many people in your practice and with all your teachings. And I really like to let people know where they find out more about you and and benefit from some of your programs and things.

Well, my office is in Laguna Hills, California, at the moment, and the best way to find me is just on my website. It's just DarinIngelsND.com, and all of our information's there.

And yeah, we'd love for people to we have a newsletter that's very active. We've got a lot of great information to share with people, so we'd love for you to join our community.

Thank you so much. And I really my heart goes out to you as far as finding a have a beautiful, clean office that you can really welcome your patients into and stay healthy yourself, you know?

Thank you. Yeah. We look forward to finding it. Makes so much for joining me today. This is an important piece of the puzzle that I think a lot of people will want to know more about and look into as part of their healing process.

Well, thank you for having me. As part of the summit.