
## Episode 61:

### Improving Energy and Other Symptoms in Mast Cell Activation Syndrome with Dr. Kelly McCann and Evan H. Hirsch, MD

[00:00:08] **Evan H. Hirsch, MD:** Hey there, welcome back to the Energy MD podcast. I'm so glad that you're here with me today, cuz today we're gonna be talking about MCAS or mast cell activation syndrome with my friend Dr. Kelly McCann. So let's learn a little bit about Dr. Kelly. So Dr. McCann's passion for understanding why certain people developed specific conditions, drove her beyond conventional medicine to study first, complimentary and alternative medicine. Then integrative medicine, functional medicine, environmental medicine, which led to an exploration of chronic infections and illness due to mold exposure. As a practicing internal medicine doctor and pediatrician, Dr. McCann utilizes her extensive knowledge of root causes, various modalities and treatment options to guide patients to health in her thriving practice. The spring center loaded located in Costa Mesa, California. Dr. McCann lectures regularly at professional conferences on topics such as complex chronic illness, Lyme disease and co-infections, environmental toxicants, mold and microtoxin illness, mast cell activation syndrome, and related illness and psychological and spiritual issues related to chronic illness. She lives in Aliso Viejo, California with her husband and their dog. Dr. Kelly, thank you so much for joining me today.

[00:01:25] **Dr. Kelly McCann:** Thank you Dr. Evan. I'm very happy to be here.

[00:01:29] **Evan H. Hirsch, MD:** So we're gonna be talking about increasing energy and improving symptoms in MCAS. But let's start off first with a definition. So what is mast cell activation syndrome?

[00:01:40] **Dr. Kelly McCann:** Sure. So mast cell activation syndrome is a multi symptom multisystem, uh, inflammatory, sometimes allergic, condition where a certain part of the immune system, namely the mast cells, which are filled with all these. inflammatory mediators or chemicals are inappropriately released, uh, when the body is exposed to something that it perceives as a threat. And so, mast cells tend to live at the areas of interface between ourselves and the outside world. So they line our respiratory tract, our GI tract, lower respiratory tract, they're on our skin. They have a, uh, an affinity for our nerves and our nervous system, our vascular system, and in our brains. And so, Because they're everywhere. Constantly surveilling for foreign invaders. When they perceive foreign invaders, like we eat something that our mast cells don't like, we can get a reaction.

[00:02:51] **Evan H. Hirsch, MD:** So why do they become activated in some people and not others?

[00:02:55] **Dr. Kelly McCann:** That's a great question. It seems that there is a genetic predisposition that some people have to have more irritable, uppity mast cells, so not, not everyone gets mast cell activation, although it's very common. the latest research shows us that it's roughly, you know, 17, 18% of the population. So nearly 20% of the population, have mast cell activation. generally it's, I find that the mast cell activation gets triggered over time, so, People might be allergic kids, they might have asthma or eczema. They might have food allergies or food sensitivities, and then something else will happen. Maybe they get another exposure, like a mold exposure or, uh, another kind of toxin exposure. They might get Lyme disease. And with each subsequent exposure, they develop more and more reactivity because the mast cells get more and more pissed off.

[00:04:06] **Evan H. Hirsch, MD:** Gotcha. So then it's like this accumulation over time, this total body.

[00:04:11] **Dr. Kelly McCann:** Yes, total body burden, whether it's mold or Lyme disease, chronic infections, environmental toxicants, and then the mast cells are so reactive, people become so sensitized to things that it becomes very challenging to try and treat them for the mold or the Lyme or whatever it is that they have that triggered it in the first place.

[00:04:34] **Evan H. Hirsch, MD:** Mm-hmm.

[00:04:35] **Dr. Kelly McCann:** Yeah.

[00:04:35] **Evan H. Hirsch, MD:** Okay. Yeah, that's helpful. That makes sense. So then, is this just about mast cells? So, you know these, these toxicants that you mentioned that are building up in the body that are triggering the mast cells, are they triggering other aspects of the immune system?

[00:04:51] **Dr. Kelly McCann:** They certainly can, yes. So in some people they can get IgE reactions.IgE is the immunoglobulin that is related to allergies. So some of my mast cell patients will have very high levels of IgE, which gives us other tools that we can use, like xolair actually works really well for patients with elevated IgE and mast cell symptoms. oftentimes they can get an autoimmune kind of picture too, so mold, lyme, chronic, environmental exposures, those things can trigger an immune disregulation where they get the autoimmune, uh, conditions as well as the mast cell activation. It's very complicated.

[00:05:37] **Evan H. Hirsch, MD:** Mm-hmm. . And so the, so the name Mast Cell Activation Syndrome also probably includes a number of these other things that are happening as, as part of the immune system. It's not. Would you, or would you say that it's just really the mast cells that are reactive in, in MCAS?

[00:05:55] **Dr. Kelly McCann:** I think people would describe it as the mast cells are reactive in ma MCAS, but there are many other related conditions. So, for example, it turns out that many of my colleagues and myself are, are seeing patients who have hyper mobility, Ehlers-Danlos syndrome, hyper mobile. Whether it's classic type or just the hyper mobile type, those people tend to have more issues with mast cells. They also tend to have dysautonomia. So we have, kind of one of my colleagues, Andrew Maxwell, who's a pediatric cardiologist in the Bay Area. he named these patients the Pentad Patients. And so it's, dysautonomia or POTS, uh, EDS, SIBO or a gastroparesis type picture, autoimmune, and then mast cell activation. And so that five, those five conditions tend to show up again and again and again in these patients.

[00:07:05] **Evan H. Hirsch, MD:** Interesting.

[00:07:06] **Dr. Kelly McCann:** Mm-hmm.

[00:07:07] **Evan H. Hirsch, MD:** And so, how do you diagnose MCAS.

[00:07:12] **Dr. Kelly McCann:** So, technically, MCAS is a clinical diagnosis, meaning if you take a good history and you see allergic inflammatory, multisystem, multi symptoms, in somebody's history, that's gotten worse over time. that is technically the most important, clinical definition. And, and then we use some labs to help, uh, corroborate that, that diagnostic, clinical suspicion. the challenge with a lot of the labs is many of the chemical messengers that we're looking for are very volatile. They're heat, sensitive, and so they will dissipate very quickly if the specimens are not handled, uh, pristinely. So we can check things like a tryptase level, which I'll talk about chromogranin A. Histamine level, uh, we can check different, metabolites. So, and methyl histamine, prostaglandin D2 leukotriene E4, and then some of their metabolites. But there really aren't that many, markers that we can check through blood or urine. maybe half a dozen and, And I'm checking those in blood and random urine and the 24-hour urine. And so when the patients have to collect that 24 hour urine, it has to be refrigerated the entire time. They have to, you know, take it on ice pack into the lab and hope that the lab keeps it on ice. And same thing with the blood draws. it requires a refrigerated centrifuge. They have to have chilled tubes to draw the blood and then refrigerate the blood while they're centrifusion it. And not all labs have have that capacity. So here locally where I am. I send people to my local hospital that has the refrigerated centrifuge, whereas a, you know, random quest or LabCorp, they, they can't do that. They can do a couple, they can do like the blood, tryptase, chromogranin A and histamine, but that's about it. And a word is just, sorry, a word about the tryptase level.

[00:09:44] **Evan H. Hirsch, MD:** Mm-hmm.

[00:09:45] **Dr. Kelly McCann:** , so there are allergists out there, who have a slightly different diagnostic criteria for mast cell activation. In my camp, we call them Consensus one doctors because they look exclusively at tryptase. And their definition for MCAS is that a patient has to have, during a flare, an elevation in their tryptase, like times 20% or something kind of silly like that. And the truth is, that tryptase reflects the amount of mast cells and the condition that we're talking about is an activation condition. So many, many, many of my mast cells, the vast majority of my mast cell activation patients do not have an elevated tryptase.

[00:10:45] **Evan H. Hirsch, MD:** Mm.

[00:10:46] **Dr. Kelly McCann:** And same thing. Sometimes people are so sick they're in a flare all the time. So how can you discern what's baseline and what's a flare in order to meet that criteria? So for consensus one, type practitioners, I find that they're not very helpful for mast cell patients.

[00:11:08] **Evan H. Hirsch, MD:** Thank you.

[00:11:09] **Dr. Kelly McCann:** Yeah.

[00:11:09] **Evan H. Hirsch, MD:** So let's talk about the controversy between clinical diagnosis versus lab diagnosis.So you mentioned that it was a clinical diagnosis. How often do you need labs in order to determine if somebody has MCAS?

[00:11:21] **Dr. Kelly McCann:** Usually I can tell by the history alone when they walk in the office, you know, if they've got a list of multiple things that they're allergic to and they're on, antihistamines regularly, and they have a history of multiple systems that are inflammatory or allergic in nature. So they've got brain fog and fatigue and joint pain and irritable bowel syndrome, and heart palpitations and depression and anxiety and peripheral neuropathy, well they probably have MCAS. yeah.

[00:12:01] **Evan H. Hirsch, MD:** And generally if they, if they feel better on antihistamines, is that diagnostic?

[00:12:07] **Dr. Kelly McCann:** That could be diagnostic? I mean it's, you know, the criteria has changed a little bit. So at one point there was a, if we treat and they get better with the treatments that are appropriate for mast cell activation, then there that kind of goes in the column of, they probably have mast cell activation. Yeah.

[00:12:26] **Evan H. Hirsch, MD:** Mm-hmm. Okay.

And so you've mentioned a lot of, some of the diagnoses or like you said, IBS and fatigue and stuff like that. Are there any other symptoms that maybe you haven't mentioned right now Or, Or would you say that there are. well, I guess you've mentioned all of 'em already, but can you just kind of take us through some of the most common symptoms of MCAS?

[00:12:45] **Dr. Kelly McCann:** Sure. So those were probably most common that I hear a lot from people. hives, skin rashes, uh, can be very, very common as well. some people get a lot of, nasal symptoms, sinus symptoms, postnasal drip. burning mouth actually is, uh, one of the symptoms that Dr. Afrin, Dr. Lawrence Afrin, uh, speaks about a great deal because, those were his initial patients and his, his intro into mast cell activation was burning mouth syndrome, with quite a number of patients. People can also have, uh, gynecologic problems. So, vaginal pain with sex, even endometrial pain, recurrent bladder infections or, uh, interstitial cystitis can be mast cell activation type symptoms. and then certainly any sort of gastrointestinal system involvement, bloating, gas, diarrhea, constipation, abdominal pain, things like that. So that's a, a smattering of things. that's, and then I guess, If we're talking about male, patients with mast cell activation, they can have prostitis, they can have bladder issues too.

[00:14:15] **Evan H. Hirsch, MD:** Mm-hmm. So we've talked about, so when somebody identifies or you're able to identify that they have am c then what is the, what does the next step, or what does treatment look like?

[00:14:30] **Dr. Kelly McCann:** So if I suspect that somebody has MCAS, I'm gonna start some treatment right away. even if I, I wanna order labs because, oftentimes the labs can take six weeks, eight weeks to get everything back cuz there's specialty labs and I'm not gonna make the person wait. so oftentimes we start with antihistamines over the counter antihistamines. They tend to work very well with some patients. or if they're already on antihistamines but not having adequate control, then we might use higher doses. so you've got your H1 blockers, your second generation H1 blockers, things like Zyrtec, Claratin, Allegra, Xyzal. And what I found is that, each person is really unique. They might respond fantastically to one, but not the others, and so we really have to try them, or potentially even do some sort of muscle testing to identify which might be the best one for them. sometimes we'll use H2 blockers like Pepzin. That's really our primary one that we can use these days. or we might use some of the older first generation, uh, H1 blockers like Benadryl or Hydroxyzine. those work very well for some patients and not for others. sometimes I'll add singulair. I use a lot of Cromolyn. Uh, so singulair would be your lucatrian inhibitor. of course there are a couple other ones. I don't use those often. but they're available if we need them. I like Cromolyn a lot. although I will say not everybody gets a benefit from it.

[00:16:22] **Evan H. Hirsch, MD:** Mm.

[00:16:23] **Dr. Kelly McCann:** Cromolyn is a mast cell stabilizer, and the way that Cromolyn works is, you put it where the person has the issue. So for example, if they have a lot of GI symptoms, they would take the Cromolyn about 20 to 30 minutes before they eat to coat the mast cells so that when you

add the food. The food isn't triggering the mast cells in the gastrointestinal tract. so it doesn't work for everyone. Some people don't. Some people get side effects, some people don't notice a benefit. and then it is available commercially, or sometimes I have to compound it for people. but I do like cromolyn. cromolyn is also available, uh, as a nasal spray, and it's also available inhaled. So, inhaled, uh, cromolyn works fantastic when people have, uh, respiratory components to their, their MCAS so I, I do like that for some people it works really, really well. It's a little tricky to get a hold of, but, But I have been able to manage that for patients. I use ketotifen also as a compounded, antihistamine, mast cell stabilizer. That works very well for some people. I've been playing around a little bit with a, a platelet activator inhibitor, called rupatadine. Uh, it's only available. Like through Canadian pharmacies these days. but that's worked for some of my patients too. I have one woman who has, MCAS and Thrombocytosis, so her platelets have been like 600. and the rupatadine has dropped it down to like 400. So it's nearly normal now, which is pretty cool.

[00:18:31] **Evan H. Hirsch, MD:** Nice. So that's all of those things that are inhibiting histamine and stabilizing mast cells and lucatrines and stuff like that, right? So they're kind of halting some of the release of the mast cell.

[00:18:46] **Dr. Kelly McCann:** Correct.

[00:18:47] **Evan H. Hirsch, MD:** What about, getting rid of the triggers? What does that look like?

[00:18:51] **Dr. Kelly McCann:** Yeah, so that's a much longer affair to try and sort that all out. so most of these patients. I'm doing these things simultaneously. So we're trying to calm everything down and then figure out what are the root causes? Is it mold? Is it EMF? Is it Lyme disease? so have them do, uh, urinary microtoxin testing most often, uh, to make sure that they're in a, a safe place. Usually most people are not in a safe place. They're in a moldy place. so we're dealing with mold both in them and in their home situation. I test routinely for Lyme disease and all the co-infections, as well. And then depending upon their level of sensitivity, will, introduce treatments, when, when we feel like the mast cells are under enough control that they can tolerate treatment. I also look at EMF. had a patient who was exquisitely electromagnetic frequency sensitive. he had to build a whole new house in that was, you know, all EMF protected and, uh, everything was hard wired. I mean, he would walk by the refrigerator and. The electromagnetic frequencies from the refrigerator would bother him. And he was exquisitely sensitive. And then it turned out in the new house where he, where he built his new house, there were some weird lay lines that were running through the property that were causing headaches. And so he had to have, you know, like a special douser come out and figure that out and, and putting special rods to move the lay lines off the property. I don't know, it was very, very, unique, but helped him a great deal once he was able to figure that out. So, you know, for a lot of people it becomes this, uh, super sleuth of trying to figure out what is the soup combination of things that are really driving their mast cell and how do we quiet all down.

[00:21:17] **Evan H. Hirsch, MD:** Very nice. So then in terms of testing, so you talked about testing people's homes. Are you a fan of the ERMI or MO plates, or what do you like to use?

[00:21:27] **Dr. Kelly McCann:** Good question. I like, uh, a reputable inspector who is thorough. and then, actually I think that, between a visual inspection and monitoring for moisture and then doing cavity samples. I actually think that that's probably the best way to go. but you know, that'll cost people a couple thousand dollars probably, if not more, depending upon the inspector. so that's, you know, gold standard. If patients aren't sure and they, They wanna do it in a step-wise fashion. Usually I'll start with the mycotoxin test.I've been, seeing a pattern that if people are in a moldy building and they're capable enough to excrete the mycotoxins, we see ochratoxin, and aflatoxin show up on a realtime lab. Plus or minus Trico seems gliotoxin, but the, the, the current exposures, at least here in California tend to be ochratoxin and alu toin.

Now, if I have them do a mycotoxin test and I think that they're adequately excreting, and they don't have ochratoxin or aflatoxin, it might be a past exposure and that's tends to bear out. pretty well. So if they have higher levels of trico, seems gliotoxins and xone, but no aflatoxin and ochratoxin, that tends to look more like a past exposure to me because when I watch people excrete over time, the first ones to come out are the ochratoxin and aflatoxin. Those diminish and then the other three usually go up high as the pattern over time, because I've been tracking patients for, you know, three years doing these , these serial real time labs every six months while they're going through their mold detox, that's a long process to get this stuff out.

[00:23:38] **Evan H. Hirsch, MD:** Mm-hmm. . And so then in terms of reputable inspectors, as you say, do you, are you a fan of building biologists or what, what, Uh, cuz I mean, some air testing, they're doing all sorts of things and it really depends on where you're located.

[00:23:56] **Dr. Kelly McCann:** Right? Yeah. It's very tricky. I find that, I mean, I. I would refer patients to or people listening to, uh, the International Society for Environmentally Acquired Illness. Uh, the ISEAI, i s e a i .org. they do have a list of reputable mold inspectors there whom I trust. I think building biologists generally are pretty good, but if somebody comes in and they're only gonna do air testing, I, I don't think that's adequate. It's just not adequate because the mold is behind the walls. So if you're not doing cavity samples, I think you're missing it. I think you can get an idea using an ERMI. Looking at the species and the numbers, but the ERMI score itself is not necessarily reflective of the health of the house. I just don't think that that's adequate.I think you need a, a thorough inspector and you need, You need to really look at the inside of the house, the outside of the house, the attic, the HVAC system. you know, in California we have sprinklers that water our vegetation that is built, that's put right up against the house and the vast majority of houses here. And those sprinkler systems hit the. And if you're not taking a cavity sample where the sprinkler system is clearly hitting the house on a regular basis, you're missing it.

[00:25:34] **Evan H. Hirsch, MD:** Mm.

[00:25:35] **Dr. Kelly McCann:** And that's what happened with my husband and I most recently. So,

[00:25:41] **Evan H. Hirsch, MD:** Okay, that's helpful. So cavity cavity samples makes me think of cavity search, , But, but so you're talking about like drilling a little hole into the dry wall and they put in a little camera, or they put in something to take a sample.

[00:25:57] **Dr. Kelly McCann:** Correct, yes. And then they usually, you know, putty the whole back up and close the whole back. So for example, I, one of my mold inspectors came. And if you have a wall that's uh, suspicious, you need to take a cavity sample in between each of the studs because that problem could be anywhere along that wall. and so what she would do is she would take a cavity sample, you know, for different spots if there were, uh, four different cavities. and then just send one of those for testing and hold the other three in reserve. Because if you get the answer, you get the, you know, the black mold or whatever it is that you think you're looking for, in this specimen that gets sent off the first time, well then you don't have to spend hundreds of dollars. You can spend a little bit less. So, I mean, there are ways to like get the answers that you need. And not spend the bazillion dollars simply during testing. but I will say, you know, one of the mold remediators that I spoke with on my summit recently, Michael Rubino, mentioned that, you know, most houses have between 20 and 30 places that are potentially problematic.

[00:27:14] **Evan H. Hirsch, MD:** Mm-hmm.

[00:27:17] **Dr. Kelly McCann:** which is just, an astronomical amount of, of potential water leaks. And so it's not really realistic to think that you're gonna find every single drop of moisture and every single mold spore in a house. You just have to find the worst ones and then hope that that's sufficient to allow, you know, somebody with mast cell, uh, and mold exposure to get better.

[00:27:50] **Evan H. Hirsch, MD:** So it sounds like the places that are the worst are probably ones that have higher moisture contents on the moisture meter. Perhaps they're using some sort of infrared light in order to detect maybe there's increased humidity behind a wall. Any other things that generally those, these inspectors are using?

[00:28:08] **Dr. Kelly McCann:** I think and then just visual inspection, you know, where are, does it look like there's water damage somewhere?. are there stains on the ceiling? Are, is there buckling on the floorboards? things like that, you know, I mean, I'm not a building biologist, so I'm assuming that that's what they're looking at.

[00:28:31] **Evan H. Hirsch, MD:** No, that's good. And then what sort of, what are the, what's the percentage of the number of homes in first world countries that have water damage?

[00:28:42] **Dr. Kelly McCann:** So the studies are a little bit old at this point, like 2009. I think the statistics were. 50 to 60% of homes in the, you know, developed world in the US and Canada had some history of water damage or moisture intrusion. and then other buildings, you know, schools, churches, grocery stores, et cetera, synagogues, I was closer to 95% I think I've lived in. 10 or 11 houses in Southern California. In 14 years, they've all been moldy, some, a lot moldy, some less so.

[00:29:28] **Evan H. Hirsch, MD:** Mm-hmm.

[00:29:29] **Dr. Kelly McCann:** Yeah. So I, I actually think the percentages are higher than 50 to 60%.

[00:29:34] **Evan H. Hirsch, MD:** Wow. And so then what's the solution in building? Do we need different building material?

[00:29:41] **Dr. Kelly McCann:** Uh, we might need different building material. We definitely need, More meticulous building. I mean, I think part of the problem in at least, you know, I can speak best to California, in California is that they just throw things up over night. You know, and so it's really shoddy workmanship. So if there's a pinhole leak, they don't care. They just throw it up there. you know, one of my, I had a whole family that was poisoned by mold because, you know, the contractor, nailed. Nailed the drain that was coming from the master shower all the way down, and they just, you know, dry, Oh, oops, whoops. Just patched the drywall back over it, they didn't care. And for three years these people were being poisoned every time they took a shower. So, I mean, you know, and we build with paper we build with wooden paper. so I think, you know, sometimes in the older buildings that are laugh and plaster, they might be a little bit better. We should probably be building more with concrete , you know, And it really does depend on the, the patient and how sensitive they are and, you know, kind of the level that they need. Certainly most of the building material is toxic anyway. So, you know, we've got those problems too, which is not necessarily a mold issue, but the paints and the glues and the VOCs, the, the foam is terribly toxic. You know, there's so many things that we're putting in our homes that are far more toxic, to us, and then you add in moisture and water and you know, it's just this terrible toxic soup of so many chemicals and mold.

[00:31:40] **Evan H. Hirsch, MD:** Mm-hmm.

[00:31:40] **Dr. Kelly McCann:** No wonder, we're sick.

[00:31:42] **Evan H. Hirsch, MD:** Right

[00:31:42] **Dr. Kelly McCann:** and then we make our house as airtight as possible, right? So, so nothing can get out.

[00:31:49] **Evan H. Hirsch, MD:** Right. And then we have a pandemic where we're spending all of our time indoors.

[00:31:53] **Dr. Kelly McCann:** Right?

[00:31:54] **Evan H. Hirsch, MD:** Or winter, Right? People feel worse in the winter sometimes because they're spending more time indoors. Is that right.

[00:32:00] **Dr. Kelly McCann:** Yes. Yes. or they, maybe they have gas heat, gas fireplaces, gas stoves, and the, the gas is equally toxic. Yeah, it gets a little daunting when you start to think about all of the chemicals and all of the toxins and it's, it's impossible to avoid them all, but we can only do what we can do, you know? So air filter in every bedroom, take your shoes off. Don't, don't, don't track all the pesticides into the house. Remove all the carpets, use area carpets only. They are washable so that you can, keep everything as clean as possible because the, a lot of the toxins are in the dust. The, the mold is in the dust, so you have to be a good housekeeper too.

[00:32:56] **Evan H. Hirsch, MD:** Mm-hmm.

[00:32:56] **Dr. Kelly McCann:** Which is really hard when you're fatigued. I know,

[00:32:59] **Evan H. Hirsch, MD:** Right. Yeah, we recommend, you know, some of those, uh, UFI or iRobots or stuff, you know mm-hmm. where, I mean, you just wanna get the ones without the wifi. but it's, you know, it can definitely help cuz if you've got it set up, it's gonna get rid of a lot of that dust. Yeah. But I just want to echo also what you said. You know, a lot of this stuff can be overwhelming, so it's really baby steps, you know, so it's like what can you do?

[00:33:23] **Dr. Kelly McCann:** Right, right. So, you know, I have patients start with organic, you know, grain free, organic, really clean up your diet. If you have DAO enzyme issues and histamine in food really bothers you, then you eat a low histamine diet. That's not the case for every person. Not everybody who has mast cell has, dietary histamine issues. They're not the same thing. And then you start working on your pots and pans, and then you work on your personal care products. And you know, I remember when I first learned about personal care products, I sat down with all my personal care products and I got out ewg.org, skin deep, and I was like, Okay, garbage, garbage, garbage. Oh, I can use this one, okay. You know, you just go through and change stuff out. It takes time.

[00:34:23] **Evan H. Hirsch, MD:** Do you have a favorite cosmetic line that's clean?

[00:34:27] **Dr. Kelly McCann:** you know, I, I use, uh, the, I think it's called Zulu. It's a, our local mothers, you know, as a health food store that they carry that. I love Josh Rosebrook skincare products. I think he makes some really beautiful skincare products. Still looking for a good hair care product. You know, so like I said, it takes time.

[00:34:55] **Evan H. Hirsch, MD:** Mm-hmm. so going back to mold. So, do you have a, a particular air filter that you like? I know that, you know, Microtoxins are smaller that than, uh, HEPA filters can usually get. So do you have any recommendations.

[00:35:15] **Dr. Kelly McCann:** I've used IQair historically and have found them to be very effective. At one point I was in a moldy house and really couldn't leave. I had a lease and I just couldn't break the lease. and I had two IQairs going simultaneously, and that really kept the smell down. Now it, it didn't resolve my symptoms, uh, at all. I still took naps on a regular basis cuz I was so fatigued all the time. But it definitely made it a little bit more tolerable. I like Air Doctor, I like uh, Blue Air. I like Austin Air. I mean, I think that there are a, a number of decent air filters out.

[00:35:59] **Evan H. Hirsch, MD:** Excellent. And then, so let's talk a little bit about treatment. For people who have MCAS, they are generally more sensitive, right? Yes. So how do you get around? I mean, if, if somebody says anything that I put in my mouth, I'm gonna react to, what do you do?

[00:36:16] **Dr. Kelly McCann:** So for those people, we really have to start with kind, with, uh, vegus nerve stimulation and limbic system retraining. We just have to calm down that limbic system that is so on fire that they can't even take anything. and I do have patients like that. not too many fortunately, but I do have some. And you know, that's where we start. And if a particular limbic system training retraining program doesn't appeal to them that we have to find something else. So we have to find a way in, that's going to calm things down, you know, So it could be emotional freedom technique. It could be, you know, biofield resonance tuning. It could be a variety of different things. Whatever it is that seems to appeal to them and helps shift their nervous system. Is going to be where we start. So, you know, I, I try and have as many different tools in my toolkit to offer people, for them to explore, to see what, what their, what is of interest to them, uh, and resonates with them. so that's where we start with those people. We may be able to start with IVs with some of those people, even though they're super sensitive and can't really take anything orally. and then the vast majority of people can take something orally. so sometimes we have to compound the antihistamines. I find that that works really well, uh, for patients who are sensitive because it turns out that they're actually sensitive not to the medication. They're sensitive to the inactive ingredients in the medications, and there's a wonderful database called N I H Daily Med, which lists all of the inactive ingredients or excipients. And so you can actually look up all the medications, both prescription and over the counter medications and figure out what the inactive ingredients is by manufacturer. There's something called a national drug code NDC on every and every prescription, and pharmaceutical in the us and so you can look up by NDC. You can look up by just label, and see what the inactive ingredients are. And so for those people who are exquisitely sensitive, I have them, you know, try and look that up and figure out, well, what is the inactive ingredient that you're really bothered by? That's in this medication, this medication, this medication. And we can try and figure it out. And so then we know we need to avoid that excipient. We can find a manufacturer that might avoid that excipient, maybe we can, you know, use regular prescriptions without having to compound everything. So there's ways around it. and then, you know, for some people they do better with herbs. so I use a lot of single herb, or nutraceuticals. Uh, for patients it might be quercetin, it could be luteolin, it could be, perilla seed or perine. you know, usually there's something that they can tolerate that works well for them. And so there's a lot, I think I. Through the course of doing the mast cell summit, I, I found I did research and found like 64 different potential supplements. So there's a lot , lot of options out there, uh, for supplements that have mast cell stabilizing effects.

[00:40:13] **Evan H. Hirsch, MD:** Excellent. So coming back around to fatigue and sleep, do you have any favorite, uh, treatments for those?

[00:40:23] **Dr. Kelly McCann:** Yes. I mean, I think with fatigue, probably the most important thing is to get to the root cause.you know, fatigue is a symptom of so many conditions. You can get fatigue with mold, you can get fatigue with lime, bartella, theia, mast cell. So treating the underlying thing is most likely gonna help the fatigue. I do use some, research nutritionals products, uh, like the ATP fuel. I do find that that works in some people. adrenal support for fatigue. sometimes just the phosphatidyl choline will help with fatigue. and I use the PC as part of my mold treatment protocol. My Cbot treatment protocol, my autoimmune treatment protocol. So I do, I love pc. I find that phosphatidyl choline works really, really well because it's the building block of every cell in the body. And if our, you know, cellular health is, is, compromised and we change out the phosphatidyl choline molecules in our cells. Our cells can function better. And the same goes through with the mitochondria. If you have, adducts DNA adducts or mitochondrial addicts sitting on the, the mitochondrial membrane and you wash them off with PC and the mitochondria will work better too. So things like that. you know, sometimes I'll do organic acid testing and treat based on, what we find in the organic acid tests. So maybe they need more riboflavin or CoQ10 or carnitine, you know, So there's a variety of different tools depending upon, what the presentation is for that person in terms of sleep. I use uh, a variety of different tools for sleep, for some people, 5-hydroxytryptophan, works great. I've been playing around with some higher melatonin doses, magnesi low dose naltrexone, which also has some benefits in patients with mast cell activation. you know, I, I made. Sleep product myself, uh, cuz I've struggled with sleep too. it's a Magnolia based product. so Magno magnolia bark hits the GABA receptors, which has a calming effect. so that's one that I, I like a lot. Not quite as potent as any beter acid like we were talking about earlier, but you know, it does okay. And then sometimes we just have to use pharmaceuticals. sometimes that's what, you know, fortunately as MDs, we can do that. We can use pharmaceuticals if necessary. and the hope is always to be able to get people to sleep and then wean them off so that they don't need that. you know, and then, and then I'm still looking at root causes. So for example, some people can eat foods. Make it difficult for them to sleep if they're dairy sensitive, for example, or sugar sensitive, uh, if they're caffeine sensitive. So, you know, stopping the caffeine can definitely improve sleep. Stopping the food sensitivities can definitely improve sleep. I wear an Oura ring. love my Oura Ring. Wonder twin powers, you know, and that, that, that tells me a lot, you know, when I have alcohol, well my sleep is not good. so, you know, you can really tell. or if I work out too hard and I'm really achy, Oh, okay, I overdid it. I didn't recover, I didn't sleep well. so the Oura ring is very useful for being able to, you know, kind of pinpoint what are your personal habits that are working, are not working for your sleep.

[00:44:53] **Evan H. Hirsch, MD:** Yeah. And what your window of sleep is. I've been kind of amazed. It keeps getting earlier, it keeps telling me now my window is like 8:45 to 9:30 , you know, And last night I went to bed at, at 9:18 and I got a 92 sleep score, so,

[00:45:09] **Dr. Kelly McCann:** woo-hoo.

[00:45:10] **Evan H. Hirsch, MD:** Yeah. I'm feeling pretty good about that, but, but yeah, I, I also find it to be really helpful.

[00:45:15] **Dr. Kelly McCann:** Mm-hmm.

[00:45:17] **Evan H. Hirsch, MD:** Excellent. So thank you so much for being with me today.

[00:45:20] **Dr. Kelly McCann:** You're welcome.

[00:45:21] **Evan H. Hirsch, MD:** I so appreciate you taking the time and sharing all this knowledge. So you have a free gift for our audience, 10 tips for detox, right?

[00:45:29] **Dr. Kelly McCann:** Yes, yes I do. so that's on the Kelly k McCann md.com. It's a little hard to find cuz it's a brand new website, but, I'd be happy to have you guys show up and take your free gift. Yeah. Yeah, this has been wonderful. As always. I enjoy our conversations.

[00:45:50] **Evan H. Hirsch, MD:** Thank you. And so, yeah, we'll drop that link below and then, on that website they'll also be able to learn more about you and what you're doing. And I know you've got a course coming out, which I'm so excited for. So definitely check out that website. Anything else you wanna say about the website or where people can find you?

[00:46:08] **Dr. Kelly McCann:** so that's, that's my online presence website. I do also have a practice, the Spring Center, and so that's a different website, thespringcenter.com. So for people who are interested in becoming patients, I'm actually currently closed to new patients right now that perhaps, check back in the spring and we'll see what happens then.

[00:46:33] **Evan H. Hirsch, MD:** Very nice check back in the spring at the spring center. Yes.

[00:46:36] **Dr. Kelly McCann:** That's right.

[00:46:37] **Evan H. Hirsch, MD:** Yes, . Excellent. Well, Dr. Kelly, thanks so much for joining me today.

[00:46:41] **Dr. Kelly McCann:** Thank you, Dr. Evan. My pleasure. Have a wonderful day.

[00:46:46] **Evan H. Hirsch, MD:** I hope you learned something on today's podcast. If you did, please share it with your friends and family and leave us a five star review on iTunes. It's really helpful for getting this information out to more people who desperately need it. Sharing all the experts I know and love and the powerful tips I have is one of my absolute favorite things to do. Thanks for being part of my c. Just a reminder, this podcast is for educational purposes only and is not a substitute for professional care by a doctor or other qualified medical professional. It is provided with the understanding that it does not constitute medical or other professional advice or services. Thanks for listening and have an amazing day.