Dr. Keesha (00:00):

Hi, everybody. Welcome back to the Reverse Autoimmune Disease summit series. This is The Autoimmune Brain, and I'm delighted to be interviewing once again, Dr. Beth O'Hara, who is a functional naturalpath specializing in complex chronic immune conditions related to mast cell activation syndrome and histamine intolerance. She's the founder and owner of Mast Cell 360, a functional and naturopathy practice designed to look at all factors surrounding health conditions, genetic, epigenetic, biochemical, physiological, environmental, and emotional. Welcome to the series once again, Dr. O'Hara.

Beth (00:37):

Thank you so much. I'm really excited to talk about this topic because it's something we don't talk enough about.

Dr. Keesha (00:43):

I agree. Well, it's actually sort of the Darling-Chopek I think inside of the functional medicine world. A lot of people are now turned on to the idea of histamine intolerance and mast cell activation. Feels like it, anyway to me, that there's a lot more awareness around it, right?

Beth (01:01):

It has come such a long way from when—I was looking at it before we had a diagnosis code and it was considered official and it's come quite a long way. I'm so excited that we're talking about this more and it's a game changer because there's so many people suffering and the statistics show us that between 9 and 17% of the general population is dealing with mast cell activation.

Dr. Keesha (01:27):

So let's talk about first, just kind of—I have a very, very intelligent listening audience always and usually they know a lot more than most doctors who have big binders on themselves that are tabbed and organized, right? That's who comes to see me, but just for people that may not have ever heard of histamine or mast cells, why don't we give some basic terminology first?

Beth (01:51):

Sure. So the mast cells are some of the frontline defending cells of the immune system. There's a lot of talk right now about the TH1 side and the TH2 side of the immune system. With the TH1 side being that pathogen killing side to kill viruses and bacteria and molds, and the TH2 site is more the chronic inflammatory side. And the mast cells are part of that side of the immune system. They're in almost all the tissues in the body and so they're in our skin, our entire GI tract, the tissues around the eyes, very high concentrations in the nervous system and the brain. These mast cells are there to sense for toxins,

for pathogens, create inflammation to surround an invading toxin or pathogen and signal to the rest of the immune system to come in and start the immune response and clean up process. These mast cells are so fascinating because they have over a thousand different receptors on the outside and over a thousand mediators inside that they can release selectively depending on what's going on in the surrounding area of them. One of those mediators is histamine, and that's probably the best known of the mast cell mediators, but we also have things like interleukins, which are a type of cytokine and cytokines are now [inaudible] a lot of people know, and those are different types of—

Dr. Keesha (03:25):

[Inaudible]

Beth (03:25):

Yeah, and those are inflammatory mediators that can be created by mast cells and some of the other cells. We also have things like tryptase and so many that there are literally hundreds of them. With histamine intolerance, people just have an issue with histamine, so it may be that the body produces too much histamine, but more often the case, if the only major thing happening is histamine intolerance, it'll be where the histamine degrading enzymes can't keep up with the production or the consumption of histamine in the body. So we can think of it kind of like a bucket metaphor and everybody has histamine and we need it to survive. It regulates sleep. It's involved in wound healing. It's involved in digestion. A number of processes, but if it gets too high, then the—think of the bucket overflowing, we start to get symptoms. In mast cell activation, it's the mast cells that are over producing a number of mediators. So histamine might just be one of them. And it tends to be more complex, whereas if we just have histamine intolerance, if we can lower the histamine load, we can figure out the triggers, if their medications or whatever's going on and support those enzymes. Often people will start to feel better. Mast cell activation we have to address all of the underlying root triggers. So the toxins, the pathogens and things like hormone imbalances. So it tends to be more complex, tends to take more work for people. It can take 1 to 3 years sometimes to get that managed.

Dr. Keesha (05:02):

Those are, of course, all of the same root triggers for autoimmune disease in general.

Beth (05:07):

Exactly. Right. There's such a huge link. So most autoimmune conditions are linked with mast cell activation, and partly because those mast cell mediators are helping to orchestrate that immune response. If the mast cells are getting dysregulated, they're not communicating the way they should be,

then they might be participating in triggering autoimmunity, along with a lot of processes that happen with those toxins and pathogens.

Dr. Keesha (05:36):

So, also this is The Autoimmune Brain and the mast cell has a sister cell in the brain that's an immune responder in the brain called the microglia. It's just quite interesting because if there's mast cell activation, there's usually microglia activation too. Carving away parts of your brain, right? Not something we really want. So having mass cells activate our—that's not a bad thing, but having them chronically activated, now we're running into trouble. Right?

Beth (06:10):

Exactly. And I think sometimes the mast cells get a bad rap that we need to just wipe them out.

Dr. Keesha (06:17):

Right.

Beth (06:17):

But we can't really survive without them. We'd have to live in bubbles because we wouldn't have anything to help guard and defend us. One of the problems though that I see is—a common approach is to have people do a cascade of different antihistamines, which can be very helpful early on if somebody is really reactive, they're really sick, they can't tolerate foods. But as a longterm approach, we can get into a lot of trouble if that's the only way of addressing the mast cell activation, because basically we're knocking them out, knocking out their ability to respond. I think this is part of the reason why I became so ill myself with this. I had mold toxicity, Lyme, Babesia, Bartonella, and I had a head injury at nine years old. I was kicked in the head by a horse and it reared up and it came down right on the top of my head. So it wasn't long after that, that I developed significant allergy type symptoms, rashes, hives, digestive issues. I had severe insomnia and anxiety, and I was really struggling to go to school because it was just all consuming. But—

Dr. Keesha (07:34):

What does a [inaudible] brain injury have to do with this? Right?

Beth (07:39):

Right.

Dr. Keesha (07:39):

[Inaudible] With your immune system activating.

Beth (07:43):

Exactly. Any time there is that kind of brain injury, we're going to have this mast cell activation and then the microglia activity like you were talking about. So I was put on a number of antihistamines early on, which helped my symptoms a lot, but we didn't know what mast cell activation syndrome was 20, 30 years ago. And it was— those antihistamines were so helpful in the beginning. I probably had a couple years of feeling better. Then I just started going downhill again. My anxiety got worse, my insomnia got worse. I think it was because we weren't dealing with the underlying root issues, the concussion—there was never any treatment for the concussion. It wasn't addressed. And the Lyme wasn't addressed. Lyme wasn't really recognized where I grew up, mold toxicity wasn't recognized. So I ended up bedridden and walking with a cane and having severe insomnia for years until we could sort these pieces out.

Dr. Keesha (08:48):

I do want to say that the story that you just told, probably 50 years ago, your body still would have been able to filter and do okay and keep up but there's such an environmental load now that the body is trying to filter. And if you're genetically not programmed to be able to do a good job with phase one and phase two liver detoxification, or to get oxygen to your tissues properly through the NOS system, or to clear things through your kidneys. So if you're genetically set up to have trouble with that, and all of these environmental toxins are hitting those snips, now you have trouble. Right?

Beth (09:32):

Exactly. Yeah. And that's a great point. I have a lot of people ask me, "Why is there suddenly more mast cell activation?"

Dr. Keesha (09:41):

Suddenly, right? Yeah.

Beth (09:43):

Is it because all of a sudden we're just over diagnosing or is it because there is really a reason that it's increasing? I think it's a combination. I think it's a combination of being recognized more. But even when I was growing up, 30, 40 years ago, we didn't have wifi routers and cell phones and things like that. The other members of my family did not get as ill as I did. So there was a genetic component there, but now that we have all of these electromagnetic fields—there's good studies that show now that EMFs affect the mast cells in the brain and they cause mast cell degranulation in the brain. So you've got an increase

of inflammation. So if you have brain autoimmunity, that's not gonna help the picture. But if we can bring that load down... I recently moved out of being really in the middle of the city where I live to the outskirts out by the woods. Just that, I noticed a difference getting out of the density and the heavy amount of electromagnetic fields.

Dr. Keesha (10:50):

Lovely 5G. I'm about to move from the forest that you can see behind me on an island to the middle of the city. And I'm just like—I have got in fact—Oh, you can't see them behind me. Kind of, there are a bunch of potted plants on my patio out there. I just this week have potted 30 plants that are going to go in this little tiny space that I'm going to live in, in Portland, Oregon, because they are nature's fabulous air filtration. And I'm like, "Okay, here's my air purifier. We're moving down." Plus, an actual air purifier that I carry on my website. And it's just like, there's so many toxins in the city. There are so many EMFs. There's so much more density of stuff that your body has to filter. Nowadays, our bodies really do struggle with that. I always say the canaries in the coal mine have a much harder time today than they would have 50, 100, 200 years ago. For sure. Right?

Beth (11:55):

Yeah. That's exactly it. When I look back, there was a family history. My grandmother always had these mystery symptoms and everybody thought she was making it up. She just—they just said she was crazy because there was no way to identify what was happening. But I really think that she was probably dealing with these things as well. The good news is there's a lot that we can do and I've run—

Dr. Keesha (12:21):

How about symptoms before we move on to what we can do? Because we haven't really talked about what are the symptoms of having mast cell activation syndrome?

Beth (12:31):

Yeah. Thank you for taking me back to that. Part of what's tricky about mast cell activation syndrome is that because these mast cells are in nearly every tissue in the body, the symptoms can be really varied. This was part of why it took so long for researchers to figure out what this was. So often people have kind of a collection of mystery symptoms in two or more systems. The classic ones are going to be what I described for myself before: itching, hives, flushing, rashes, those kinds of clearly allergic types of symptoms. But that's the skin involvement and not everybody has skin involvement. I have plenty of clients who don't—they don't have any skin involvement at all, but they might have digestive issues. So they're dealing with diarrhea or constipation, maybe some acid reflux—

Dr. Keesha (13:29):

And it's pretty quickly after they eat too. Right? So they eat something and it can—

Beth (13:35):

It can be immediately, or it can be up to 2 or 3 days after eating a trigger food. What's really classic with mast cell activation is when people are reacting to the smell of foods or they're reacting as soon as they put something in their mouth. Of course that's not everybody either, but that's a good telltale sign that this is not just histamine intolerance.

Dr. Keesha (13:58):

And they test negative for pregnancy. [Laughing]

Beth (14:00):

Right! [Laughing]

Dr. Keesha (14:04):

I had those symptoms four times. [Laughing]

Beth (14:12):

Yeah, exactly. So to go with those combos, sleep disruptions are really common and the mast cells are part of setting the circadian rhythm. So that can be part of why. Then just having—if you have brain involvement with mast cell activation, you're going to have that inflammation. You can have sleep disturbances, anxiety, there's something called mast cell rages and I've had these myself. And it's where, if you just all of a sudden have so much degranulation, sometimes people get this surge of rage and it feels like becoming the Incredible Hulk. I'm pretty soft spoken and I'm not a real aggressive person, but I could scare myself with it sometimes when that was going on. This is something where we can have more compassion around—particularly practitioners who aren't familiar with working with these things, compassion with people who are just struggling and it may not be their fault that they're having trouble like this. So there are ways to take the edge off. There are those nervous system involvements, people can even have heart palpitations, low blood pressure is very common, but not always. And then—so we talked about the gut. We talked about the heart. Skin. We talked about the brain. Sometimes people have a lot of muscle pain, they can have joint pain, they can have bone pain and osteoporosis is even linked. Now if we look at autoimmunity, Hashimoto's, all of the bowel autoimmunity like Crohn's, has some associations. Then brain autoimmunity has a lot of associations with mast cell activation as well.

Dr. Keesha (16:04):

So I've had a few patients that have had mast cell activation syndrome and been put on total parental nutrition or TPN and lipids just to bypass everything. It hasn't been because the doctor really understood mast cell activation. As I look at how TPN is delivered and how it's made and the things like what the lipids are, I sometimes wonder is TPN itself activating this?

Beth (16:35):

Yeah. I have some people that have really struggled with foods and looked for any kind of option at all. A lot of those formulas do have triggers in them. And they have a lot of sugar and of course, you've got to have some source of carbohydrates if you can't eat anything, but elevated blood sugar is a mast cell trigger as well. There's a link with type two diabetes with mast cell activation. So that is a concerning piece.

Dr. Keesha (17:10):

Sometimes I do genetics and I find out they have methylation issues, 'Cause I think most people with mast cell activation do, from what I've discovered just anecdotally in my practice. Then a nutritionist is not filling a methylated form, B12 or folate, in there. Then I think, "Oh, then the body is having to work a lot harder to deal with this non methylated form." Right?

Beth (17:34):

Right. Then it becomes very tricky because a lot of people with mast cell activation have mold toxicity, and it's— 80% of my practice is mold toxicity. And people with mold toxicity often have methylation issues just as a result of that and often aren't tolerating very many supplements. So I find that the methylated vitamins can be challenging for many people early on. There's also a process called M tour and it's the cellular growth and division process in the body. It's also a process that pathogens will hijack and be able to replicate. If we get too high on the methyl B12 or the methyl folate, it can drive that process and that process can also drive some mast cell activation. So with people struggling with mast cell activation, there's so many different little tweaks that's helpful to make for them that aren't part of the standard protocols. That's why they're always falling through the cracks. That was who I was. I went to over 50 practitioners and everybody was just mystified by what I was going through. The worst ones told me that it was in my head or I wanted to be sick.

Dr. Keesha (18:54):

There's a component to that though. I'm only saying that to kind of like be contrarian in terms of, you and I both have psychology education. And there is this idea that psychosomatic means that the person that's saying that some of this is in your head is actually saying, "You're crazy. There's nothing going on."

The absolute truth is the head and the body are not disconnected from one another. Right? There is going to be some emotional stuff going on here. When your body isn't functioning and you're afraid you're about to die, you're going to start having survival issues.

Beth (19:35):

Absolutely. Right.

Dr. Keesha (19:36):

[Inaudible] have a root chakra that's completely out of balance. And there's going to be all kinds of stuff going on. So whenever my patients come and say, "So and so said it was all in my head." I go, "Okay, so let's be with that." Yeah. Some of it is by the way, because how you perceive yourself and your world sets up your whole biochemistry. So let's be with that idea! Right? Just because there's some truth to it, it's just that the person that told you that doesn't really understand what they were saying. They were separating those things. They were saying that you need a psychologist instead of somebody that's in medicine. That's inaccurate. Right? Yeah.

Beth (20:16):

Right. That's what I love about your work is that you bring that element in. I find with mast cell activation, 50% of what we're doing is identifying those root triggers, addressing things like mold toxicity, tweaking supplements, and making sure that the right forms and the right timing and the right—getting it on slowly and carefully and doing microdosing, checking the environment, making sure we've got clean air, checking people's water source, all these things. Electromagnetic fields. The full 50% for people is working with their nervous system. So I like to say that, "No, you didn't invent all this. You did not make it up." I don't see people wanting to be sick, but it is that it's our nervous system because of that intertwinement of the nervous system and the mast cells. I've done experiments where I've started ruminating on something stressful just to see what happens. One of my first symptoms will be that my knuckles will swell in my hands, and within about two minutes, I can see, I can watch it start to swell. So it's swelling my hands. It's swelling in my brain and other areas of my body. Then I've done a lot of meditation, so I can kind of shift to that mode fairly easily now if I focus and within a few minutes it all drains away and it's gone. That's such a powerful tool, especially for people who are really sensitive and struggling with any kind of supplements and people with brain inflammation and autoimmunity, absolutely crucial and key. I like to look at those supports from 3 angles and one is doing an active kind of involvement where you're working on your thoughts and your perceptions and your breathing, meditations, visualizations. However people like to do that. Lots of great programs for that. Then a passive receptive where we just completely let go and listen to things like guided meditations, or I really like—for some people that can handle it, binaural beats and things like that, that help reset the nervous system signaling. Then the last piece is the structural piece. Working on the vagal nerve, working on the

alignment of the cranial bones with things like craniosacral therapy, making sure that there aren't subluxations in the top of the neck—the vertebrae at the top of the neck that might be putting pressure on that vagal nerve and the other cranial nerves. It can really help a lot. I know you do a lot of that, but I find that many people who come in and, like me they saw so many practitioners, it's a missing piece. That if we bring it in, people can heal so much quicker.

Dr. Keesha (23:09):

It's so true. I mean, I'm sitting in front of you right now with back pain that is not normal for me. I've been down in bed for about 3 days with it, which also, I've never called in sick a day in my life and I'm 55. Like I've never had any of this kind of stuff. Right? So as I was sitting there contemplating it, I thought, "Okay, so I was moving furniture, but there's usually an emotional component to this. What is it?" Right? And I thought, "Oh, I'm moving. My little navy brat kid in here is probably really anxious and I haven't actually given her any time to really talk to her and say, okay, I've got you. You don't have to be the first one in the classroom. I'll do it." Right? " I'll hold your hand and say it's all right and just really be with her." I was kind of like just working, doing everything that needs to happen and didn't even check in with the part that really hates moving and hates being the new kid in school. When I did that, I started feeling this release. So there was this mechanical injury that happened, but then there was also this other part that I found when I went and checked in. It's like, "Oh yeah, I haven't been giving you what you need in terms of really listening." The idea behind it's all in your head or all of those things is just give that space. Like what Dr. Ohara was saying, it's important. It's one of the pieces of the puzzle. In the end, it could also be the gluten that you ate two days ago. [Laughing]

Beth (24:48):

How do you know? But I love that. That's so beautiful. I find that that kind of self-talk is—One of the other ways I got so sick was whipping myself and I pushed and pushed through premed. I was gonna go to medical school, have full scholarship, which is rare to get, and I worked so hard for it. I pushed so hard in undergraduate school. I completely crashed. I couldn't get out of bed. I knew there was no way I was gonna make it. It took me a long time to learn that pushing myself was not the way to get things done. One of the mottos that I have in my practice now is that in mast cell activation, going slower is going to be much faster in the long run, but trying to go fast is gonna set us back and it's gonna be so much slower in the long run. I think that positive self talk is so helpful because when we're dealing with these things, it can be bewildering and it can be very lonely. Particularly if you have friends and family who've never had these kinds of issues. But if we can step back and go, "You know what? I'm going to take care of me now." I find many of us didn't get that experience when we were younger, for some reason or another.

Dr. Keesha (26:11):

Right.

Beth (26:11):

But we can always give it to ourselves now and that's a huge part of the healing process as well.

Dr. Keesha (26:18):

So what else, when you start—you said you just taught your first 360 class, right?

Beth (26:28):

I did, yes. I just taught a class called the top eight mast cell supporting supplements. It's all about really gentle supplements and how to slowly onboard them. It's a very different way of doing supplements than what you generally see. So how we start with things very slowly, and then we kind of get something up to a certain level, then we can layer in the next thing and some different ways of doing supplements. Like some things—maybe 30 minutes before meals to help. There's actually a supplement in there that really helps with neural inflammation and it's called Baikal, it's Chinese skullcap extract. It also has great benefits for the mast cells.

Dr. Keesha (27:16):

I think this is a really important piece also, is I always say, "Start low, go slow." If anyone ever has any problems with supplements, I say, "Go off all of them." Or someone will write to me and say, "Could this supplement have caused this thing?" And I always say "Yes." Always. Always! Never let a doctor tell you that the medication they started you on or the supplement they started you on, or the diet you just got started on for your protocol could not cause whatever you're having. It can always cause it, right? So the best thing to do is, I always say, just stop everything and we're going to start over even tinier dosing and we're going to go slower. So I think that's really important for people to hear, that they actually are sovereign of their own bodies, their own health. You guys know yourselves, right? You've lived in this body longer than anyone else has, so you get to speak up for yourself and say, "I'm really sensitive." Whenever anyone says that to me, I listen.

Beth (28:17):

Right, right. Same here. With brain autoimmunity, we start to lose some of the blood brain barrier. I certainly had that. I also identify with being on the autism spectrum on the Asperger's side, and that's a neuroinflammatory condition. So when I was really ill, even a sprinkle of a supplement, within about 20 minutes, I could feel effects on my brain. Positive or negative. And people would say, "Well, that can't happen." I was like, "Well, if you have a really leaky gut and a really leaky blood brain barrier and a fast

blood flow, then it can." Things like L-glutamine, which should have been so great for my gut, even sprinkles made my anxiety so much worse and sleep insomnia, even worse. Again, because of that leaky blood brain barrier, it could just pass right through and then convert to glutamate in the brain. So people can listen to themselves and know that not all supplements are going to cause problems, but if you can choose wisely and find somebody who's used to working with supplements to help you pick the right things, then you can get the correct things on board for you to go slowly. And sometimes it's a different form. Sometimes people do okay with a Baikal extract powder, but sometimes people need a tincture and they can go a little slower with that. I have people use a journal. So it's just a really easy sheet where they write on the left hand side, whatever was new that day. If it was a food or maybe they had a stressful event, or they try to supplement how much. Then just track any symptom that goes up or down on the right hand side. Don't list all the symptoms and don't list everything that happened. Just the changes. That can help people start to find the patterns too, because sometimes the supplement will build on somebody and you can look back and go, "Oh, well that probably started a few days ago", before they picked up on it. I found that immensely helpful when I was figuring out what would work for me and what wouldn't.

Dr. Keesha (30:29):

What have we not covered that you would like to? As we wind down our time here.

Beth (30:36):

I think the biggest one is—and I've had brain autoimmunity myself. I've had the markers, I've done the testing [inaudible] and a number of people with mast cell activation struggle with these things is to just not give up that. There were so many times that I almost gave up and I wanted to give up and a mentor of mine said, "With everything you've been through only about 1 in 10 people would've kept going, but it's the people that keep going that are going to get better." There were times I was so ill. I was bedridden and I really didn't think I was gonna live, but I made it. I went back to graduate school and I run a busy practice and I can go hiking and bicycle riding. I have a full normal life other than I take more supplements than most people do. But I just want people to have that encouragement and that hope. A lot of times it's finding the right practitioner and the right fit for you to help guide you through.

Dr. Keesha (31:44):

I'm really glad you said that because I don't think I've ever said that in a summit. I think it's a really good point. I take more supplements than most people do too. I think the folks that do have that Canary in the coal mine set of genetics and then environmental or emotional traumas from early on that set everything up, need a little bit more support than others that don't have those things. So I appreciate you saying that. That's a really good point to make.

Beth (32:15):

Yeah. Sometimes we have to shift our expectations around it. That's something I always do in my practice is the expectation setting—

Dr. Keesha (32:20):

Yeah.

Beth (32:20):

—That you may have more on board than you've had before, or you're used to, but it's really comes down to how do you feel? I'll swallow any supplement I need to swallow if I get my life back.

Dr. Keesha (32:33):

Quality of life, yeah. I agree. Thank you. So dr OHara for joining us and for sharing your wisdom.

Beth (32:42):

Oh, it's always good to be with you. I'm so glad we can do this and get this information out. I really hope you feel better soon.

Dr. Keesha (32:51):

The good news is the cycles always come back up to the top again. So thank you. All right everybody, until next time.