Transcript: #334 How to Address Mast Cell Activation Syndrome and Histamine Intolerance with Beth O'Hara

Wendy Myers: Hello. My name is Wendy Myers. Welcome to the Myers Detox Podcast. You can check me out, my work at myersdetox.com. Today, we have a very important show for you. We have Beth O'Hara who is going to be talking about mast cell activation, how that relates to histamine intolerance and getting healthy in a toxic world and why toxins and detox issues can dramatically impact and cause immune system issues like mast cell activation syndrome and histamine intolerance, the big cause of this form of immune system malfunction.

Wendy Myers: We'll talk about how to recognize it and some solutions what to do about it. Beth, she specializes in mast cell activation syndrome because she suffered from this herself for so many years and she's a foremost expert on it. We're going to be talking about why mast cell activation is on the rise in 10 toxins. If you have a lot of food sensitivity issues and can only handle a handful of foods. You can only eat five or 10 or 20 foods, you want to be looking into mast cell activation syndrome and addressing this so that you can incorporate more foods into your diet.

Wendy Myers: We'll talk about what triggers mast cell activation syndrome, where to get a comprehensive list of high histamine foods. Some people they have histamine intolerance. Some people have oxalate issues. Some people have mast cell activation syndrome. Some people have all of the above. So the doctor is going to be talking about how to differentiate between those and how to systematically go about, figuring out what you have. We'll also, like I said, talk about what to do if you suspect mast cell activation syndrome or histamine intolerance.

Wendy Myers: I know you guys listening to this show are concerned about toxins and concerned about the levels of toxins in your body. I created a quiz called heavymetalsquiz.com. You can go there and take a two-minute quiz. After you

take it, you get your results and you get a free video series that talk about detox toxins, where to start, what to do and answer a lot of questions that people have about where to start when it comes to detox, because there's a lot to it. If you guys listen to this podcast, may have gathered. But the video series helps to get you started on your path, on your detox journey, on your road to healing. So check that out at heavymetalsquiz.com.

Wendy Myers: Our guest today, Beth O'Hara, she is a functional naturopath specializing in complex chronic health conditions related to mast cell activation syndrome and histamine intolerance including food sensitivities, fibromyalgia, chronic fatigue, mold toxicity, chemical sensitivities and autism spectrum disorders. She's the founder and owner of Mast Cell 360, functional naturopathy practice designed to look at all factors surrounding health conditions, genetic biochemical, emotional and environmental. She designed Mast Cell 360 to be the kind of practice she wished that she had existed when she was severely ill with mast cell activation syndrome.

Wendy Myers: Through her Mast Cell 360 root-cause process, her clients regain their health and get their lives back. She holds a doctorate in functional naturopathy, a master's degree in marriage and family therapy and a bachelor's degree in the physiological psychology. She is certified in functional genomic analysis and is a research advisor for the NutriGenetic Research Institute. She presents at the Functional Medicine Conference on mast cell activation or at conferences and histamine intolerance as well as training functional medical practitioners in the use of genetics and biochemistry in these chronic health conditions. You can learn more about Beth and her work at mastcell360.com.

Wendy Myers: Beth, thanks so much for coming on the show.

Beth O'Hara: Thanks, Wendy. I'm really excited about what we're going to talk about today. I think it's going to be a game-changer for a lot of people.

Wendy Myers: Yes. A lot of the people that I met, a lot of clients suffering have mast cell activation. They don't really know what's wrong with them. They don't know what it's called, they don't know what it's causing it. Conventional medical doctors have no clue about this. So it's a really important conversation to have. But first, why don't we start with your story and your suffering and how you came to be an expert on mast cell activation.

Beth O'Hara: Sure. Well, I like to share my story because a lot of people can relate to it, and here's why. So we hear that the gold standard in healthcare is measured by whether or not your protocol can help 80% of people that come through your door, as a healthcare practitioner. But that means 20% of people fall through the cracks and they don't get the help that they need. And that's due to genetics and block detox pathways, and really specifically due to unidentified root causes. This means that a lot of people don't get the help they need and unfortunately there's so many practitioners out there that just still aren't looking for root causes.

Beth O'Hara: That's not good enough for me because we can do better and also because I was also always in that 20% that fell through the cracks. So I was never really well as a child. I grew up in the country. We didn't know at the time that the farm house was full of mold. Of course, I was running out in the field so I was covered in ticks. I got a lot of tick bites.

Wendy Myers: Oh, no.

Beth O'Hara: So I ended up contracting Lyme and Bartonella and Babesia at a young age. I know it's symptom wise, but I wasn't tested for it ever back then. Then I started getting all these weird symptoms. So when you grow up in the country, you end up usually grow green beans and you can them. I'd end up covered in hives from picking the green beans or from feeding corn to the chickens. I'd be so itchy, I just scratched my skin until it was bleeding. I ended up with asthma at a young age. I had a lot of digestive problems. I was always really tired.

Beth O'Hara: My mom took me from doctor to doctor to doctor and they put me on all these medications. So as a young age, I was on more medications than both my parents put together. As it went on, I ended up with chronic fatigue and fibromyalgia and all these allergic reactions and acid reflux. Then I ended up with anxiety and really severe insomnia. What we now know is that I had mast cell activation syndrome and histamine intolerance and chronic Lyme and mold toxicity.

Beth O'Hara: How I got into working with all this, so when I was six, I decided I was going to be a doctor. It was just like super single focused and when I was 16, all I wanted was Grey's Anatomy. I pushed my way through college, but when it was time to go to medical school, I just couldn't function anymore. My body just crashed. I had a couple of scholarship offers. I had to turn them all down and I was just devastated because I didn't know what I was going to do.

Beth O'Hara: Instead of becoming a physician, I learned how to be a severely chronically ill patient. So I stayed on that circuit with Western medicine. I did holistic medicine. I did homeopathy. I did emotional healing. I did shaman work. Everything I could come up with. I was very involved in yoga and became a yoga therapist, but I still was getting more ill and I finally made my way to the most experienced functional medicine practitioner who at that point told me... We worked here for maybe three years and of course we did things like L-glutamine to help heal my gut, but that made me more anxious and gave me insomnia.

Beth O'Hara: Then we tried curcumin for inflammation. That made me more inflamed. At that point, I was mostly bedridden. I could barely work and I had to walk with a cane. I could barely walk even with the cane. I was in excruciating joint pain non-stop. One of the worst cases of insomnia even still I've ever seen. When he told me that he didn't know what else to do for me, I had seen over 50 practitioners spent well over $150,000.

Beth O'Hara: I knew if I was going to live, I was going to have to figure this out. I had this lucky break. So a friend of mine told me about 23andMe and this was eight years ago. So genetic analysis was really new. She said, "I think you'll find some answers there." We were looking at about 60 variants at that time. Now, we're at over 10,000. So it's just grown exponentially. But I just dove into that because I knew that was going to reveal some things. I found that my detox pathway has a lot of genetic variants there, genetic variants for high glutamate, which was why the glutamine wouldn't work. I was over methylated which is why I couldn't do the curcumin.

Beth O'Hara: So all these pieces started coming together. I started getting my life back. I figured out my joint pain was oxalates which are in certain plants and going on a low oxalate diet, I was off that cane in two weeks. My energy started coming back, my brain started coming back and eventually I was able to go back to graduate school and become a functional naturopath specializing in the mast cell activation syndrome and histamine tolerance in these triggering conditions like mold toxicity, chronic infections, genetic issues, looking at detox. So now I'm healthier than I've been ever in my life. So I'm really excited to get to say that.

Wendy Myers: That just sounds so harrowing where you just... There's a lot of stories like that of people just go to doctor, to doctor, to doctor and test after test, and no one can figure out what is wrong with them.

Beth O'Hara: It's awful. It really was a nightmare. It's sometimes hard to talk about this piece, but the way I got through was thinking about that one day I was going to die and the pain would be over. Because it was so awful, and it feels like it was a different lifetime ago. I don't have any of those symptoms anymore. I don't have the fatigue. I have to take care of my body and I can't eat fast food and I can't eat super high histamine foods. I was down to 20 foods at one point. 30 if you counted salt, pepper and the herbs I could eat.

Beth O'Hara: Now, I have a wide variety of foods and I don't have anxiety. I sleep well. 29 nights out of 30. It's been a huge change and that's what I see in my practice too when we really take this root-cause approach. So being able to get that 80% gold standard to 95%. I think that's more where we need to be. That's what we have the tools for is we can help 95% of people. The other 5% I find are people that aren't ready or able to do the work they need to do to recover their health, which can be understandable because it's a lot of work. It's a lot of work for me. It's a lot of work for my clients that come through, but when people show up and they're ready and willing to do that work, they get better. People that are housebound get back to traveling going to visit their kids. It's amazing what we can do when we can land on those root components and I think that's the key and detox is a big part of that.

Wendy Myers: So let's talk about mast cell activation syndrome. So this is a malfunction of the immune system, but why don't you just lay out exactly what it is and what the symptoms are?

Beth O'Hara: Yeah, let's start with the symptoms because people are always asking could this be me and then we'll talk about the mast cells and what they are. So symptoms people should be thinking about. There are different presentation types. The classic that's recognized the most is flushing after high histamine foods like wine or beer, even spinach, strawberries pineapple, allergy kind of symptoms, post nasal drip, itchy eyes, hives, nasal congestion.

Beth O'Hara: Also, people can have GI issues, sleep issues, breathing issues like asthma. Then there are people who don't have the classic allergy kind of symptoms, hay fever kind of symptoms and those people fall through the cracks even more because there's a misperception out there. I have a lot of people come in and say, "Well, my allergist told me or my immunologist told me if I don't have itching, if I don't have allergies, and I don't have post nasal drips then I can't have mast cell activation syndrome. That's not true.

Beth O'Hara: So I have a client, I'll call her Jane because I won't use her real name. But she has sleep issues. She has nerve pain and digestive issues, but no skin symptoms, none of the nasal sinus. So why do we have such wide variety of symptoms? It's because the mast cells are present in almost all of the tissues in the body and it depends on which tissues are being affected and which collection of cells are being affected. The mast cell activation syndrome, it's estimated that it's affecting between 9 and 17% of the population.

Beth O'Hara: So that's at least one in 10 people. What we're finding in the chronically ill population is it's at least 50%. So one in two which is a lot. This is happening because these mast cells are like the frontline defenders of the immune system and kind of like, if we think of them as the guards of the castle guarding the gates, and their job is to recognize when invaders are coming in, they create inflammation to surround that invader whether it's a virus, a bacteria, mold or even some kind of allergen or toxin like a chemical that we shouldn't be in the body.

Beth O'Hara: Then they signal to the rest of the immune system and orchestrate the rest of the immune response. These mast cells are really fascinating cells because they have all of these different... So about 200 or more receptors on the outside that can respond to different things coming in from the environment and then they have over 200 different mediators, inflammatory mediators that they can selectively release depending on what's going on.

Beth O'Hara: So they're extremely critical in the body. They get a bad rap in terms of traditional medicine talking about mast cell activation syndrome. But they're really necessary for survival. We can't really survive well without them. What's happening is we're living in this extremely toxic environment and so they're constantly bombarded. So if we think about just a human being that's a guard to a castle, they should work an eight-hour shift and then go relax. They're probably not going to be constant invaders. They would just turn away what

tries to come into the castle, shouldn't be there and then let in the food delivery people, those kinds of things.

Beth O'Hara: If they have to do battle 24/7, non-stop, they start to get dysregulated. Instead of recognizing what is a friend and what's an enemy, they start to shoot at the butterflies is how I described it. So they start to shoot at things like normal foods. People start getting food reactions. People start reacting more to stress. Then we get these strange kind of symptom presentations that can be really varied.

Wendy Myers: Yeah. I know we have all those clients that can't eat five foods or 10 foods or 20 foods that are just so frustrated. They think it's the food. They think that there's something they just can't eat these foods and it's really a much deeper problem. Why is this on the rise? Because I'm seeing more and more clients with this and hearing other practitioners talk about this, leaky cells. They call them leaky cells. So why is this on the rise and how do toxins contribute to this health issue?

Beth O'Hara: So there are a few different factors to it. One is that we live in a more toxic world than we ever have before. So we have pollution from industry. We've got car exhaust pollution. We have toxic products we bring onto our homes and that we don't even think about. So like off-gassing from that new couch or I bought like a small kind of table and it was a side table. I thought it was going to be fine. We unboxed it. It was so intense to smell. It made my eyes burn. My husband who's not that sensitive, he couldn't handle it being in the room. We had to put it in the garage for two weeks.

Wendy Myers: Where did you get this table?

Beth O'Hara: I got on Amazon. Lesson learned there.

Wendy Myers: You don't buy supplements or side tables on Amazon.

Beth O'Hara: Exactly, but it matched the kitchen. Also, other things we don't think about, all these fragrance products, fragrance candles. Even all of the deodorants have fragrance and then we can get into the aluminum issue and blocking sweat glands. But fragrance is a big immune disruptor. A lot of cleaning products, conventional, personal care and cleaning products. These aren't regulated at all and they're very toxic. Then we have poor nutrition both with process types, standard American diets, but we also inherit the nutritional status of our parents.

Beth O'Hara: So now we have three generations maybe four. As we start to think about the younger children that we're seeing. I mean, I've got kids in my practice that are three years old and they're going into anaphylaxis, and having these really extreme reactions where their throat starts to close up. They can't breathe. We check their micronutrients and there just tanked.

Beth O'Hara: Then we have more electromagnetic exposure, so this is new. So all this electromagnetic exposure from our cellphones and from Wi-Fi and laptops. There's clear evidence, clear research know that these electromagnetic fields, degranulate the mast cells. A lot has been done on the mast cells in the brain. This is a big contributor to autism. Then we have research that's showing that mold is growing up to 600 times faster in the presence of these electronics and these fields.

Beth O'Hara: So where the normal levels of mold that we've lived with since human beings have been on the planet didn't bother people very much, now we're getting just a super extreme growth, and the body can't keep up with it. I think our medication use is another part of the problem. So we use a lot of acid blockers. So that's the type of antihistamine, that H2 antihistamine. So these are things like Zantac and Tagamet. These block histamine in the stomach and then they we have the H1 blocker. So things like Clear and Allegra, but also Benadryl.

Beth O'Hara: What happens of these medications is they block the histamine receptors and then the body thinks it has less histamine so it starts producing more histamine. Histamine is a mediator of mast cells created. Then the histamine level triggers the mast cells to produce even more inflammation. So it becomes a snowball effect. Also, it's having-

Wendy Myers: Now, there's so many people on stomach acid blockers.

Beth O'Hara: Right.

Wendy Myers: There's so many people.

Beth O'Hara: It's one of top prescribed medications. Then the proton pump inhibitors are even more of an issue. The other thing that's happening with these medications that dampen down the histamine and the mast cell response, if that's all we're doing, the mast cells are what protect us from infections. I think that's why I got so sick. I was on so many antihistamine medications and steroids, and things like that, that we're dampening my immune response to the mold toxicity, the Lyme's, the Babesia, the Bartonella in my body. It was able to just go unchecked because there was no guard at the gate anymore.

Wendy Myers: Yeah. I had a lot of allergies and I grew up on my whole teen life was on antihistamines because it's just chronic runny nose and I felt I had allergies and I just lived on it. Just took it every day without even thinking. It's not a wonder I wasn't more sick.

Beth O'Hara: Great. That's great.

Wendy Myers: Yeah. So how is the mast cell activation related to histamine intolerance? and because I know a lot of people have identified histamines and then look to avoid high histamine foods. Can you explain the relationship and why... We'll talk

about that histamine foods in a second, but let's talk about the relationship right now between histamine intolerance and mast cell activation syndrome.

Beth O'Hara: Sure. So they are related, but they're separate. So the mast cells will produce histamine and we can also have a buildup of histamine in our bodies from these histamine foods that we'll talk about, high histamine foods. So mast cell activation syndrome is specifically where the mast cells are dysregulated and involves all of these different mediators. So this 200 plus mediators including histamine. We just know of histamine the best, but there are many others.

Beth O'Hara: Histamine intolerance specifically is the inability to break down histamine fast enough. So histamine raises in the body. So there are few different biochemical pathways. So some people that listen to a lot of podcasts like this may have heard of diamine oxidase. So that's produced in the gut. Then there's one called HNMT, histamine-N-methyltransferase. That works more systemically and works in the brain. It's dependent on methylation.

Beth O'Hara: So if methylation is affected then that HNMT isn't going to function. Then there's some other pathways acetylation is a phase to detox pathway that also breaks down histamine, and there's some other enzymes that are involved as that goes along. So we can have genetic issues that mean we don't produce enough of those enzymes. Any gut infection is going to affect the ability to produce that diamine oxidase enzyme in the gut. So even if I see people with absolutely no genetic variants, but we check the diamine oxidase levels and they're tanked and so clean the gut and it comes back online so that's the good thing.

Beth O'Hara: Then if we have a lot of toxicity, the toxins can use up some of these pathways. So all the methyl groups may be used up and so we can't use that HNMT pathway. Or if we've got a lot of chemical toxins clogging the acetylation pathway, it's not available. It's some more minor histamine decorator, but it is there. So people can have just one or the other or they can have both. When you have both, it's more debilitating. So typically histamine intolerance on its own is annoying. It causes some issues, but it's not as severe as the mast cell activation syndrome and then people who have both like I do, we have a lot more symptoms and a lot more trouble.

Beth O'Hara: So it takes a lot of teasing out to figure out the differences and a lot of people think they just have histamine intolerance. Actually, I have both. I thought I just had histamine intolerance in the beginning. One of the differences with mast cell activation syndrome, you get a larger breadth of symptoms and also triggers like just smelling fragrance will set it off, set off the symptoms. I have people who soon as they put food in their mouth, their hands start to swell and they haven't even finished chewing or swallowing or they start to get gut symptoms. They have to run to the bathroom. So those are typically associated with mast cell activation syndrome.

Wendy Myers: Yes. So people that have histamine intolerance, let's talk about some of the foods that are high histamine. There's also a great app too. There's an app you

can look up or food intolerances and histamine intolerance that will list all the foods. So it takes the guesswork out of that. But let's talk about some of the foods that if you have histamine intolerance, you want to avoid or reduce.

Beth O'Hara: Yeah. So if you just have histamine intolerance, you just have to look at histamine. So the higher histamine foods include things like anything aged or fermented. So this is one of the ways I got in trouble. When I was getting really into researching for my health and trying to improve my health, I got involved with the Weston Price movement which is based on a lot of fermentation. I was making my own kombucha, my own kefir. I was making my own bone broths all of the time and lots of ferments. So lots of kimchi. So my kitchen looked like a little mini lab, food lab.

Beth O'Hara: It's a great way of looking at the way we used to eat an ancestral eating in particular, but we didn't know about overdoing it back then. I was getting worse and worse, more itchy, more acid reflux. So all of those are high histamine foods. So those wonderful things we think about healing the gut, if you have history intolerance, those actually make the gut worse. So I'm not saying they're bad across the board. If people don't have histamine intolerance, absolutely do those, and they're wonderful gut healers. But if you have histamine intolerance, you're not going to feel as good on those.

Beth O'Hara: Those are things we wouldn't think about. We talked about before spinach is high histamine. Pineapple, strawberries. Beef and most bison, they're aged for two weeks so they're hung to make them more tender, but the bacteria build and bacteria will produce histamine. That's also why we get it in the fermented foods. So those are some of the big ones. Peanuts, cashews, walnuts, are higher histamine. Then people with mast cell activation syndrome have to often think about another category through food called lectins. They're protein and certain foods especially the new world foods like the nightshades, tomatoes and eggplants, pumpkin, squashes, sunflower seeds, pumpkin seeds, a lot of grains.

Beth O'Hara: So some people who actually aren't gluten intolerance but react to wheat leaped very high in lectins. Then there's the other category, the oxalates I mentioned earlier which are in other plants, spinach and Swiss chard, and sweet potatoes. That's why I was on the cane. I was eating so many high oxalate foods. Oxalates looked like tiny little razor blades or shards of glass under a microscope. That's what happens and they can deposit in the joints. They're most known for kidney stones, but that’s only about 1% of oxalate issues.

Beth O'Hara: Other than that, they'll deposit in the joints. They'll cause interstitial cystitis. All of these trigger the mast cells. So I do have a really good food list so it looks at the histamine liberators, and the high histamine foods and also flags that oxalate lectin foods. So if people are interested in that, they can find that on my website.

Wendy Myers: What's your website again?

Beth O'Hara: It's mastcell360.com, and then for the food list there's a menu item that's MCAS. Under that it says resources and it's right there at the top, their food list. That's a really solid one based in research.

Wendy Myers: Fantastic. That's so important to experiment with these foods, remove them from your diet, do a food elimination and a challenge and see if your symptoms disappear. When you were talking, I'm thinking of my fiance. He has histamine intolerance. That's why he's having GERD and itchiness and other kinds of symptoms, and like just a light bulb went off for me. He's just having a lot of acid reflux and he can't figure out what's going on, but just a light bulb went off for me when we were listing all these foods. That's all he's eating, pineapple, beef.

Beth O'Hara: Right, exactly. He probably eats much more healthier than a lot of people, but sometimes people start to get symptoms because they go out and they have shrimp cocktail before dinner and they have a glass of beer or glass of wine. And then maybe they have some things that's got some pineapple or they have a steak with dinner. Then they have these symptoms and they can't figure out why. In then the next night, they eat something totally different. What's also tricky about it is it can take up to two to three days for the symptoms to show up. So it can get a little hard to track. So I have people start with a lower histamine diet and just keep that food journal and see what's happening and see what clears up there.

Wendy Myers: Then the fermented foods like you said, so many people are eating them thinking they're healthy but they can cause problems and bone broth, bone broth proteins are really popular. That's just the kiss of death for some people, but one one man's panacea is another man's poison. So just because it's healthy, a healthy food, it doesn't mean it's healthy for you.

Beth O'Hara: Exactly.

Wendy Myers: But one distinction I wanted to make is there's a lot of supplements coming out on the market that are fermented, but the bacteria aren't allowed to stay alive like in powders. So like the fermented supplements tend to be okay as far as histamine are concerned. As far as my knowledge is concerned.

Beth O'Hara: It depends on which bacteria they are. Some bacteria are histamine increasing and some are histamine decreasing. So for example there's a nasal probiotic called LCPI. This probiotics is really helpful in people that have these kinds of issues. However, bulgaricus and KCI are histamine raising. So people that aren't tolerating probiotics, a lot of times it's those two strains. They're in almost all the big blends of probiotics. Things like nattokinase, I find out well tolerated. That's an enzyme that's often used to degrade biofilm.

Beth O'Hara: But then we can try different biofilm degrader and then that works better. So we have to get really honed in. I do worry about the bone broth movement. Now, I know people that heal their guts with bone broth and ferment, so again that can

be wonderful for certain people. I worry about it where it's being used quite a lot in the autism protocols. Mast activation syndrome is strongly linked in autism because autism is brain inflammation. If you have inflammation you have mast cell involvement, and the research is clear on that link with autism as well. Then there's high glutamate into the bone broth. So I see kids on the spectrum sometimes get worse on that bone broth. So we got to watch them really carefully with some these high histamine things.

Wendy Myers: I mean you can get too much of a good thing. We know those people out there that buy their bone broth protein powder or just go nuts with it and eating it every single day or doing a greens powder that has spinach which is great periodically. Not if you have histamine intolerance or oxalate issues, but for other people, still you can get too much of a good thing. You've got to do stuff in moderation.

Beth O'Hara: Exactly.

Wendy Myers: They need a very varied diet if you're able to. So talk to us about how someone can know if they have mast cell activation or histamine intolerance? Did you answer that enough before? Did you have more you wanted to elaborate?

Beth O'Hara: Yeah. We can say a little bit more so. If there are mystery symptoms in two or more systems, that no one can figure out, the baseline workup looks normal, so a complete metabolic profile, complete blood count, CBC and CMP. Those are the usual panels that are run and your typical checkup. Those are looking normal, but nothing is making sense. That's when it's time to start thinking about it. So if you have GI issues and sleep issues, if you have the classic signs like itching, flushing, breathing issues, allergy symptoms, definitely.

Beth O'Hara: I have a mast cell activation syndrome symptoms survey people can check out. You can just take that symptom survey and see what you think. I tell people if you score more than 50 points, then you need to be looking into this. Also, if you've had any chronic infections, if you have SIBO, so these things are going to trigger mast cell activation syndrome. There are two kinds of presentations of people. So people come in and they've either been like me. They've never felt well. They haven't been well since they were kids and so there's probably a genetic component for them where they have really early toxic or pathogen exposures.

Beth O'Hara: I have a client. She just chucked along her life eating her hamburgers and french fries and having beer on the weekends, never any health issues, and then she moved into a house that had toxic mold. Once she developed that mold toxicity, her house just really fell apart. I have another person that never had issues and was an international athlete like a competitive athlete, and then got Lyme infection. He'd been pushing his body way too hard with the competitions, he couldn't fight off the Lyme and then he was put on a lot of antibiotics and those trigger mast cell activation syndrome also and they developed it from then.

Beth O'Hara: So people can just take that symptom survey and if they're thinking this might be them or they want to even just roll it out, so if you come back about 20-25, you might not worry about it unless you're under representing your symptoms. And so you can find that at mastcell360.com and just click on the blog and it's in there at the top of the blog list.

Wendy Myers: Fantastic. It's interesting how some people will acquire infections or get mold toxicity live in a moldy environment and it's like what is the symptoms of the mold and what's the mast cell activation. What are mold mycotoxins and what symptoms of them derive from mast cell activation?

Beth O'Hara: It's a great question and I don't know that we can even tease it apart because if there's that ongoing... And the mycotoxins are just so toxic. They down regulate the immune system and then they open us up to more infections. See a lot of people get mycotoxins and they end up with severe chronic Candida issues, SIBO issues that weren't resolving. It's because that mycotoxin layer hasn't been dealt with. Or when these Lyme protocols just keep failing, almost always fine. There's a mycotoxin layer that hasn't been addressed. They're such major immune disruptors. If we think of them as having programming, it's almost like the programming gets all dysregulated. Then those mast cells can't function the way that they're meant to.

Wendy Myers: Let's talk about detox issues like people that are having problems detoxing that are wanting to detox. How are detox issues involved in mast cell activation syndrome and histamine intolerance?

Beth O'Hara: So anytime we don't have detox supported, we have toxins building in the body. Those toxins are going to trigger the mast cells. There's so many reasons that we could have detox tissues. So we could have detox issues because we're exposed to a lot of things, because you were working in a work environment where they just remodeled and they just brought a new carpet and new furniture and painted, and everything's off gassing. We can have detox tissues because we don't eat well. Pathogens produce so many toxins and then what I see often is when people do, even if they don't do antibiotics, but they did an aggressive killing protocol and detoxification wasn't supported for the die-off toxins, then they can develop mast cell activation syndrome because of that.

Beth O'Hara: Another big one is just unaddressed constipation. So those toxins are reabsorbing. Mast cells line the entire gut and anytime those toxins are getting reabsorbed, they're going to affect it. When people aren't drinking enough water. Water is actually a natural antihistamine. One of the best things that we can be doing drinking clean water. Water that's been filtered.

Beth O'Hara: A lot of people come in and they say they've been put on a detox protocol but I take a look and they've been put on like glutathione and some B vitamins to support methylation. But there's no binder in there. There's no bio support and so what's happening is that glutathione is pushing the detox faster. The toxins

are hitting the intestines and then they're just reabsorbing because there's nothing there to catch it. I know from listening your podcast that you talk a lot about how important those binders are. So your listeners know to make sure that they're supporting that.

Beth O'Hara: So a lot of detox protocols, people aren't aware of the phases of detox. So the elimination phase with the binders and supporting bile, but then there's six reactions in phase two than in phase one. We have all those CYP450 enzymes and the PON1 enzymes. There's hundreds of CYP450s. So detox protocols are way more complex than what a lot of people out there are doing. They tie in with the mast cells.

Beth O'Hara: So we kind of touched on that acetylation. If people seem to have a lot of sensitivity to cigarette smoke, that can be a clue like it gives them a headache. They can't stand to be around it. It's broken down by the acetylation so that may need some extra support. That gets supported by things like calcium pyruvate and B5. Then sulfation is one of those phase 2 reactions. It's important in detox. So I saw in your story you use the Quinton water. I love that product and it's rich in sulfates. The other cool thing about sulfates is that the mast cells use sulfates to create what's called heparin sulfate.

Beth O'Hara: That's the molecule they used to stabilize themselves. So what I worry about is when people are reading, there are a lot written about genetic analysis online that is really incomplete because one, it's such a huge topic. It's such a deep topic of study. But one of the things that's out there, that's a misconception is that if people have those CBS genetic variants that affect transsulfuration. So if you haven't heard of that, that has to do with how homocysteine direct it down to make glutathione. It also pushes down to a pathway called sulfation.

Beth O'Hara: So there are things written that if you have that genetic variant, you should stop eating sulfur foods. I actually read that early on and stop eating sulfur foods myself because I wasn't feeling well with them, and that pathway was backing up which may have to happen temporarily, but we don't ever want to do that long-term. So the sulfur foods like cabbage, broccoli, cauliflower, Brussel sprouts, even onions, the reason is we're so dependent on sulfur. I got worse and worse and worse being off the sulfur foods and I see that with other people too. We can't detox. The mast cells just go out of control because they can't make the heparin sulfate stabilize themselves.

Beth O'Hara: Then we have what is one of my favorite topics these days which is the glucuronidation. When I started getting into this to prepare to present at a conference, so I was presenting a conference and the conference organizer, Bob Miller said, "Which pathway do you want to present on?" I said, "Well, I'll do acetylation and then I'll do glucuronidation. I don't know a lot about it. there's not much written on it in any of the detox texts, so it should be easy to cover." I was so wrong. So what I thought was going to be like five hours of preparation ended up a hundred hours of research.

Wendy Myers: Oh, wow.

Beth O'Hara: Because there's almost nothing written in the text. I had nothing in my naturopathy graduate courses on it. I mean, like a page. That's it. That's why I thought it was going to be super simple. As I delved into it, a research article called it the most important detox pathway because it breaks down 40 to 70% of toxins including mold toxins, toxins from pathogens, chemical toxins, medications. It breaks down estrogen. It breaks down thyroid hormone, bilirubin. It breaks down CBD and melatonin. So sometimes people are reacting to these, I'll find like a pattern in there and then it's that glucuronidation.

Beth O'Hara: So when estrogen isn't breaking down and it's rising and people are... Even if estrogen is low. The people that are estrogen dominant, that estrogen also triggers the mast cells to produce more histamine. Histamine causes raises in estrogen and we get another snowball effect.

Wendy Myers: I thought it was really interesting that you mentioned the water that when people are dehydrated, which most people are chronically dehydrated, because they're not drinking the right kind of water, they're not drinking properly filtered water, they're not doing the structured water. They don't have enough minerals to hold on of the water. There's lots of things people get wrong about hydration. But if you don't have enough, you're going to release more histamine. So that's the simplest most basic thing you can do to reduce histamines.

Beth O'Hara: Exactly.

Wendy Myers: So what's the first step someone should take if they suspect that they have these issues?

Beth O'Hara: People will email me and say, "I'm not sure if I have this. What should I do?" I would take that symptom survey and then I would try the low histamine diet, and maybe even try the lower oxalate, low leptin version and see if that works for you. So if the low histamine diet starts to clear it up, and the symptoms are gone, that's fantastic. So then what you can do is modulate your histamine intake and then work with somebody who really understands histamine intolerance and can help figure out why. Regardless, we want to look at the root causes of what's going on.

Beth O'Hara: A lot of these high histamine foods are high nutrient and so we don't want to take them out forever. We want to find out what we can do to fix the underlying root causes and then hopefully increase the amount of histamine foods that we can eat so we have more variety and more nutrition. Then what some people will find is either the low histamine diet does nothing for them and so they may have just mast cell activation syndrome or if they do, low histamine, low oxalate, low lectin, they get a little bit better, but there's still a lot of symptoms. Then they probably have mast cell activation syndrome and histamine intolerance.

Beth O'Hara: So at that point you want to work with somebody who's really specialized in this. There are some practitioners out there. So I specialize in it. There are a few others that are really good and fortunately there's not enough of us right now. There's no training right now in medical schools on this. We only got a diagnosis code three years ago. So I started working with this and studying it and healing myself with it back eight years ago when we just had this as a theoretical stage. But I knew reading about it like boom, this is what I have going on, and it made all the difference.

Beth O'Hara: Really, it's about drilling into what are the root triggers for that person. There are many possibilities so there's three triggers we talked about like lectins and oxalates beyond just the histamine but also histamine. Of course processed foods. Anything like that, preservatives, colorings. There are the different kinds of infections like mold, Lyme, chronic infections, Epstein-Barr, SIBO. Then toxicity where it's just built up in the body and that could be chemical toxins, metal toxins. They're genetic triggers and they're a lot. So I'm looking at over 10,000 genetic variants that can trigger these kinds of chronic issues for people. That can also impact these different presentations that we see.

Beth O'Hara: Nutrient deficiencies are a big one. Especially when people have been trying really hard to figure this out on their own and repaired themselves down to like the five foods like you mentioned before. When we get that low, we do not have the nutrients that we need to detox. We don't have the nutrients we need to stabilize those mast cells.

Beth O'Hara: Then hormone imbalances is a big one especially estrogen dominance. Even women in menopause can be estrogen dominant. So if we have more estrogen and progesterone or estrogen dominant, even for not menstruating. We talked about why that's an issue. Airway issues are a big one that I look for. They could have sleep apnea or they could be like me, I'm normal weight, but my dental arch is why I have braces now. My dental arch was so narrow, there wasn't room for my tongue and my throat was blocked 70% on an x-ray, standing up so it was worse lying down. If we can't get enough oxygen, our bodies just can't look properly. Oxygen is needed for all these biochemical reactions. And then that creates this adrenaline state that causes more mast cell activation.

Beth O'Hara: Then I always save this one for last because people sometimes get tired of hearing about it, but stress is massive and I tell people in my practice, if you don't manage your stress we're only going to get you about 60% of the way. We've got to bring in parasympathetic balancing, breathing practices, those kinds of things, learning how to stay calm when things go wrong and how to stay centered. Stress is a huge muscle trigger.

Beth O'Hara: So those are the big ones and just really finding a good functional practitioner who understands it and also who doesn't tell you everything is in your head. Unfortunately, I have new clients every single week who've been told this. It's traumatizing. I was told it repeatedly because my lab work looked normal. It's

the worst thing that can be said to a chronically ill patient. So that's why I get on a rant about it.

Wendy Myers: Yeah, that just pisses me off.

Beth O'Hara: It does to me too.

Wendy Myers: It angers me because if someone has a limited tool kit because they're not curious, they don't ask questions, they don't seek answers for themselves or their patients, it's their fault.

Beth O'Hara: Right.

Wendy Myers: It's just unbelievable to me.

Beth O'Hara: It's really an excuse for not knowing and instead of just being humble and transparent and authentic in saying, "I'm so sorry. I don't know, but let me help you get to somebody who does." It's just an ego, it responds. Even personality disorders aren't on people's heads. That's a trauma based issue. It incenses me. You've got to find somebody who really takes you seriously, knows what they're doing because this is extremely complex. It's just impossible for people to be on their own and people come in have been trying to do it on their own for five, six years, but they keep getting worse. But if we get them going on the right things, I have people really turn around anywhere from six months to... If people are more severe, it might take two or three years, but they get their lives back.

Wendy Myers: It's one of those things where if they're really, really ill, it's just going to be a longer road for you. It's going to be a longer road for detox. Usually, if someone is very, very ill, they've got a lot of genetic issues, they have to overcome and it takes a lot of trial and error to figure out what's going to work for them and get them on the road back to health.

Beth O'Hara: It definitely does. I tell people think about how long you've been ill and then it may take anywhere from one to five months per year depending on how significant it is, how many genetic variants there are, how significant those are. So that takes more work. How many root factors they are? So I had all seven of the root factors that I look at. If people want to read more about those because there's so much to say about them and there's just never enough time to go into my own depth, then I have a free report on those root causes in mast cell activation syndrome and all the related conditions.

Beth O'Hara: So if you have something related to mast cell activation syndrome, it's related to chronic infections, it's related to autoimmunity, it's related to autism, then that's at mastcell360.com/freereport. You can download it. It's just emailed to your inbox and it's a several page report that just talks about each one of these. You can really identify if this sounds like you and if it does then the really good thing is there are ways to get better. But I also tell people it's not for everybody because like you're saying, it is a lot of work.

Beth O'Hara: It takes changing your diet, changing things about your lifestyle. You have to get functional tests. You have to take supplements, but if there's somebody who's willing to put the work and I haven't found someone yet out of hundreds and hundreds of people that I've worked with who haven't gotten good results and we haven't found some big puzzle pieces. But people who aren't willing to do that kind of work probably are going to have to do the pharmaceutical route like antihistamines. But we just have to know and understand that that's just masking symptoms and that mast cell activation syndrome will still be progressive if that's all we do. And that's exactly what happened with me.

Beth O'Hara: I'm not anti-medication and there are people out there who need to use some medications and that's totally fine, but the medications for mast cell activation syndrome and histamine issues have a lot of side effects. Some of them like Benadryl cause dementia and then you need more and more medications over time. So that's all that we do. That just snowballs, and it's not looking at the root causes.

Wendy Myers: Yeah, because you mentioned that histamine is going to have a rebound effect where it ultimately makes your histamine symptoms worse, your immune system have a worse rebound effect because it's trying to produce more histamine because they're being suppressed.

Beth O'Hara: Exactly, exactly. When there's too many people out there who are suffering because they have been overlooked, these things have been under diagnosed, it's hard to find good help. With the right help, they don't have to suffer like that. So I had this client, and I'll just call her, Janet. So when I met her, she was completely housebound because every time she left her house, she would have a panic attack. What we finally figured out was that... So she started to think it was all... She thought it was in her head. So she thought she had agoraphobia, and that she needed to see a psychologist.

Beth O'Hara: I said, "Well, definitely do that if you feel like you need to do that. Let's also look at..." I had to make a journal of what had happened when she left her house, and every time she was leaving her house, she had a fragrance exposure. It was causing a massive reaction in her brain that was triggering panic attack. So we worked remotely. So I work with almost all my clients remotely and she was in another state, but we just kept working through these root causes for her. It took about, I think was 14 months. Her symptoms were down to 10% of what they were when we met. She had gone to New York to see her daughter. They were there for a week. They went to see shows.

Beth O'Hara: We worked out a plan for what she could eat at restaurants. She got to eat out. Then she realized that what she thought was agoraphobia really was just her body just knew when she left the house, she was going to get triggered. She had so much toxicity built up in her body. She had a lot of mold toxins that she didn't know about, and when we started cleaning those out, she didn't have those

reactions anymore. She didn't enjoy the smell of the fragrance or I've been triggered in like getting in an Uber or Lyft and they have this car fragrance thing.

Wendy Myers: All of them. What is that? Why do they have all these disgusting fragrances like a company policy.

Beth O'Hara: It's terrible. I actually sent an email to Lyft, you guys should get rid of these. Do you know how many chemically sensitive people are out there? I had an asthma attack. I almost never have asthma, but I had an asthma attack, getting in one a couple years ago. So I asked them to take it and put it in the trunk, which I'm very kind when I asked. Then they do it, and then I tipped them really well. But these are the kinds of things that we can do and just work out a plan for the food. So we can use things like diamine oxidase, supplements to help people be able to eat and not be triggered. People with these kind of conditions probably aren't going to go back to having a spinach salad with strawberries and pineapple and a glass of wine and a steak, all the same meal, if they have the histamine intolerance. But we can get back to getting to have really good foods, variety of foods, eating in healthy restaurants that make fresh foods and good foods.We should be able to travel. We should be able to have a good quality of life.

Wendy Myers: Fantastic. Your site sounds like such an important resource for so many people because I mean most of the ones that I see have pretty significant food intolerances and whether they realize it or not, histamine issue, the mast cell issues as well. So thanks so much. That was such an informative podcast. That was so good, and I know that you're helping so many people just having a light bulb go off for them that, "Oh, this is what's going on with me," and now they have a roadmap about what to do. So anyone, if this a light bulb moment for them, go to Beth's site at mastcell360.com. So thanks for coming on the show.

Beth O'Hara: Thank you so much, Wendy. I'm really excited that we can team up like this to help people. And if I can take just the nightmare journey that I had and help others with it, then it makes it worth it.

Wendy Myers: Fantastic. Well, thanks for coming on the show and everyone, thanks so much for tuning in to the Myers Detox Podcast. It's my pleasure every week to serve you to give you information that could change your life. So I hope today was no different. So thanks for tuning in and I will talk to you guys next week.