Discover The Mysteries In Histamine, Hormones & Gut Health Transcript

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Introduction to Histamine, Mast Cells, and Hormones

Welcome back to a reversing mast cell]Activation syndrome and histamine intolerance summit. I'm your host, Dr. Meg Mill. And today, I want to talk to you about some different connections with histamine, mast cells, hormones, and gut health and how all of these things are interconnected.

And they have this complex interplay in the body that serve a purpose but don't always serve you. And sometimes we can get some of these symptoms when some of these things start to get off balance.

And I want to kind of unravel the connection for you today and kind of explain what things are happening and why this is happening in your body. So mast cells actually have estrogen receptors on their surface.

When estrogen binds to the receptor, it can actually trigger the release of more histamine from your mast cells. So therefore higher levels of estrogen can lead to increased levels of histamine from the cells.

Estrogen will cause this mast salty granulation. And there actually is a point to it. The point is to tell the uterus if a sperm and an egg meet and they want to implant, you actually need histamine.

You actually need it to do its job.

How Estrogen Triggers Histamine Release

But then if you don't want to become pregnant, you have this histamine and the other molecules are floating around and we start to get the symptoms. We don't want to have cramps, diarrhea, migraines, mood swings, anxiety, rashes, all of these things that can be caused by this histamine release.

And it can be different in your cycles. That's why some of these symptoms can feel even more mysterious because estrogen can affect histamine. As we said we're going to cycle estrogen can increase.

Histamine can increase. Astrodome. We're talking through why that's happening. But estrogen actually also changes through your cycle. So histamine symptoms can change as estrogen changes when you have your period your estrogen is nice and low.

And then right before you ovulate or release your egg it goes up really, really high. So it's going to jump up. And this is also why histamine symptoms can feel so mysterious.

Because you might feel more histamine symptoms at the time of month when you're estrogen is actually higher. So you might be able to tolerate a histamine containing food at a certain time in your cycle, but you can't at another time.

And you may not even be aware that that has anything to do with your cycle. But it can because of this symbiotic relationship with estrogen and histamine.

So while you have your period at the beginning of your cycle, your estrogen is nice and low. And then right before you ovulate or release your egg, it goes really, really high.

And that's what's actually supposed to happen. But for some women, we're going to see more symptoms. And that can happen for several different reasons.

Estrogen can slow down the rate at which we break down histamine, particularly in foods. So estrogen can inhibit diamine oxidase, the enzyme we've been talking about that breaks down histamine in the digestive tract.

Cycle-Related Histamine Symptoms and Estrogen Dominance

And this reduction in diamine oxidase means that histamines not effectively being broken down in our foods, leading to an accumulation of histamine and worsening our symptoms.

Estrogen also need some of the same cofactors as histamine metabolism. So things like magnesium, zinc. Sammy. And we've talked about some of the pathways in which histamine breaks down.

But you need certain enzymes. As we've been talking about and nutrient cofactors to break down histamine. And if they're being used they can't do that.

Well. So then when you have all of this estrogen, you can have something like a glass of wine that's histamine containing and completely overreact. You might have a rash, you might get a migraine, you might get congestion, you might get anxiety, you might have bloating and diarrhea, maybe your symptoms that are disturbing in all sorts of different ways.

And then you can have it at a different time of the month and actually feel like, oh, well, I felt fine. And that's why it can be very confusing. We also can look at at the threshold.

So how much of it you had, what you had that contain histamine in a different food. So if you had the glass of wine with, let's say, an avocado, maybe the combined effect made you have all the symptoms.

And so it can be hard to pinpoint some of these symptoms because you could be having them at certain times and not others. We often also see a lot of these symptoms right before you have your period and what we call the PMS window because we become estrogen dominant often in that.

So you're having more estrogen than your progesterone. Your progesterone can drop too quickly. And progesterone can also play a role here because progesterone is actually believed to help stabilize mast cells and actually reduce histamine release and enhance diamine oxidase function.

So when we're thinking about that and we get this cycle of estrogen dominance where we have more estrogen than we do progesterone, our hormones are getting off balance.

And balance is the key. And that's why a lot of these symptoms can start to get worse during paramedic pause. Because we know in perimenopause that our progesterone goes down before our estrogen.

Generally we're actually getting that drop in progesterone. So we still might be making a good deal of estrogen. But we don't have that progesterone to balance it out.

So you're getting the potentiated effects of the histamine without the balance of progesterone. That can help with the upregulation of that diamine oxidase.

And then we can start to see some of these other feedback loops happen. Because histamine can actually influence the hypothalamus. And that's a key brain region that regulates hormonal activity.

It can actually stimulate the hypothalamus to release the gonadotropin releasing hormone and the pituitary gland to release LH and FSH.

Progesterone, Perimenopause, and the Histamine Feedback Loop

And in response to the LH, FSH, the ovaries produce and release more estrogen. So as we see again, more histamine can increase production of estrogen and potentially exacerbating symptoms related to high estrogen and histamine.

And so we want to break this cycle and we can take it a step further, because stress can also cause your mast cells

to deregulate and break and open and release histamine and other inflammatory chemicals in your body.

And your adrenal glands release more and more cortisol as anti-inflammatory agents, essentially making the adrenal glands work overtime so cortisol affects the hormone imbalance also, and it just creates this ongoing cycle.

So now you may be thinking, you're telling me that my hormones can be increasing my histamine symptoms, but they could be off balance and that that can be affecting my mast cell activation and all of these things.

But what should I do about it? And that's where we want to go back to that pyramid that I was talking about because, you know, at the top, think of your symptoms.

So you might be having cramps, you might have PMS, you might have anxiety, you might have bloating, you might have other digestive issues, you might have rashes and skin issues and congestion and all of these.

And you may not have all of them, may just have some of them. It's a combination for everyone is a little bit different. So then we look down and we're looking at the hormones and we're saying, okay, well, you know, a piece of this could be that your estrogens high, that your progesterone is low, that you have a dysregulation of stress hormones and that can be playing a role.

But we need to take again a step deeper and say, why. So why are the hormones off balance? Why are we having the symptoms. And we need to look at that other level.

And that's where we come back. As I've been reiterating over and over in the summer to looking at gut health, because that's often where we can see these invaders come in this inflammation, this dysregulation, and your immune system start to happen.

That's creating a lot of these symptoms. And when we look at estrogen metabolism, we're going to get a little bit deeper in our talk with Carrie Jones on hormones.

We're going to look at the gut and the liver.

Stress, Cortisol, and Hormone Imbalance

So when we look at hormone metabolism which we're going to get into even deeper in our talk with Carrie Jones, we see that we have two phases of estrogen metabolism in the liver and one in the gut.

And I like to use a test called the Dutch test, because we can really see all of these phases of metabolism and what we need to do to change the pathways, but we need to make sure that our liver is functioning optimally.

And you know that that's part of our digestive tract. We need to make sure that we're processing the toxins that we're actually breaking down the histamine.

Remember we talked about histamine and methyltransferase. We need to make sure that we're getting all of these functions that were processed using estrogen.

And then after estrogen gets through the liver and actually binds to bile, it's packaged nice and neatly. And then after estrogen gets through the liver, it's packaged nice and neatly with bile, and it goes into the digestive.

And then after estrogen gets process and liver, it goes in the digestive tract. And it's packaged nice and neatly with bile and it's meant to be excreted.

We can now see something on a stool test called beta glucan. But when we do stool testing, we see something called beta glucan, a disease.

Gut Health, Estrogen Metabolism, and the Microbiome

And you might have heard the term astro baloney because we're having the microbiome and the extra bone. And that's where beta glucan comes in. But what it can do is it can break the bind of estrogen and bile.

And when this starts to happen, we start to see the estrogen recirculate into the system. It's not being excreted. So when we think of estrogen we want to think of use it and lose it.

We want to have enough that it's functioning and doing the things that should do, but we want the rest of it to be excreted. And we can break that bind and see an overload of estrogen going back into the system.

You may be seeing that actually happen from an issue in your gut. We also have mast cells that line our entire GI tract from the mouth down the esophagus.

You swallow your food in your stomach into the intestines, and a lot of them have a type of receptor called an H2 or histamine two receptor, along with other mast cell receptors that are sensing everything you swallow every particle food, every drop of liquid.

And they're also sensing bacteria, fungus, parasites, anything in your gut. So we can have things like CFO, small intestinal fungal overgrowth, which is often associated when we have mold colonization.

We see Sibo, small intestinal bacteria overgrowth, which we dive into in a whole nother conversation. Parasites H pylori, other infections can all cause a lot of mast cell problems in the GI tract, and then the mast cells trigger potentiated the histamine release.

The diamine oxidase is also produced in the brush border of the intestinal tract, so any impairment of the intestines result in a lack of diamine oxidase, impairing histamine breakdown.

So this is a major reason why people suffering from gastrointestinal conditions also seem to suffer from histamine intolerance, and we can see the hormonal component coming in.

In addition, we can actually see certain bacteria releasing histamine. So if you have dysbiosis going on an imbalance of your good and bad bacteria, it can actually be causing the release of his in your body.

Another thing that plays a role that we've been talking about is that we need that certain nutria to have all of these functions work the way they're supposed to work.

And if we're not digesting and absorbing the nutrients we need like the B vitamins, magnesium, the zinc, the copper, the vitamin C, we're not able to break down our histamine.

We're not able to metabolize hormones, we're not able to have all the things function that should be happening.

Nutrients, Root Causes, and Summit Wrap-Up

So we need to make sure that we're getting the right nutrients and that we're actually digesting and absorbing these nutrients. So we just need to pay attention to the interconnectedness of all of our symptoms and get to the root of why histamine is being released and not broken down, so that we can resolve our symptoms.

If you're ready to start that journey, I would love to support you. Also, lean into all of the wonderful speakers we have on the summit and see what relates to you, what symptoms you're experiencing, and I hope some of these interconnected pieces are helping you figure out that while it's complex, so many of these things can be reversed.

We just have to pull that string and start to unwind the connections. And once we do that, we see everything start to fall back into place. And I'm going to be doing some classes after the summit to actually get more in depth into some of these dynamics and help support you.

So make sure you have info at Meg Malcolm on your safe list. I'll be reaching out and I have so many things that

we've talked about linked in our summit resources at megmill.com/summit that just megmill.com/summit If you'd like lifetime access to the entire summit reach out to support@drtalks.com and they can get you all set up.

Have a wonderful day. See you tomorrow.