Introduction and Guest Background

Welcome back to the reversing mast cell activation syndrome and histamine intolerance summit. I'm your host, Beth O'Hara of Mast Cell 360. And I'm so delighted to have back with us, Doctor Isaac Elias.

And today we are going to be talking about the role of mast cells in cancer. And ways that you can protect and take care of yourself and support your body in terms of reducing that kind of risk.

So if you missed our first interview, I really want to encourage you to go back and listen to that one as well. There's some great context around the survival paradox.

If you if you didn't hear Doctor Elias's bio, I want to share that with you. He's an expert in the field of integrative medicine, focusing on cancer detoxification and complex conditions.

And he's a respected physician, researcher, bestselling author, educator, and mind body practitioner. And he partners with leading research institutes including Harvard, National Institutes of Health, Columbia, and others to coauthor.

And he's the coauthor of many studies on integrative therapies for cancer, heavy metal toxicity, and others. He's the founder and medical director of Amitabha medical Clinic in Santa Rosa, California, where he's pioneered the use of therapeutic A for resist treatment in chronic degenerative conditions.

And he's one of our biggest supporters on the summit, making it possible to get this information out to you. So once again, I just really want to thank you for how much support you've given us.

And I don't think we could have launched this without your help, you know. Thank you. And thank you for having me. You know, in the summit. It's such an important summit.

And I'm glad. I'm glad to be part of it. So it now we're going to dive into the roles of mast cells with cancer.

Mast Cells, Cancer, and the Survival Paradox

And this is something that's always on top of my mind in terms of the levels of toxicity I've been exposed to. But I'm just me. But so many people. We work with.

And then I know that mast cells can, affect some of the immune pathways. Can you talk with us about the role of mass activation in cancer risk and the development of cancer and then metastasis?

Yes. So, you know, when we talk about mast cell activation in cancer, we can look at the phenomena of muscle activation. And as you hinted what is driving it.

If we look it's at the survival paradox. And just to briefly talk about the survival paradox as it sound is the paradox. And it really offers a new paradigm shift in how we think about our health.

So we are automatically wired to survive. We we respond automatically within a fraction of a second. So the autonomic nervous system that activates immediately upon threat.

And that's what happened. We get an activation sympathetic system goes into fight or flight, increased heart rate dilated airways, energy mobilization, inflammatory response.

Right. That will drive muscle activation and symptoms. And that also will drive cancer to metastasize. And then the

sympathetic tries to rest and recover.

But we can see that over time we don't make it back to the baseline. Now that's a key thing. We don't make it back to the baseline because of the traumatic event, because of the memory in the body that we talked last time.

And you showed your amazing story because of the PTSD, because of the memory that doesn't allow us to respond fresh. And when we don't respond fresh to the incident without carrying a baggage of experiences from the past, which relates to us, to ancestors, to epigenetics, to toxins, we no longer have a appropriate response for every time we just dropped our rest line, and then we don't have my cell activation.

There is a normal response and it comes out, but you can see we really lose it. But then afterwards we get a biochemical response and the biochemical response is driven by galectin three, which is a combo hydrate binding protein that actually drives the inflammatory compounds into the different tissues.

So I want to pick and we're going to talk about cancer. But just I want a little bit explain about it before going to cancer. So this is galectin three. So what happened.

This is a carbohydrate binding protein which means it binds to two galaxy S two different sugars. And it creates a lattice formation through paint. It creates a coating a biofilm in the tail.

Sclerotic plaque a micro environment where toxins are hidden, where traumas are hidden. From my perspective, from a holistic point of view and the moment we have an initiation or we worry about it, the area which is not functioning normally turns on and creates inflammation or muscle response.

So this is for example, some of the compounds that are driven by galectin three. So we can see the fiber fiber connecting collagen. The effect on the connective tissue, the shut down of the normal immune response, the growth factors, the effect on neuroinflammation and G2 and and Gags and the sticky molecules it creates clogging and clumping.

And we don't get oxygen into the tissue. And of course it drives the multiple cancer pattern VEGF. I mean, a lot of a lot of the of the ligands here, like cancer treatments, regulations, we bring them at time of crisis.

But galectin three also activate the muscle. So the same connecting to it will activate the cancer process and will create angiogenesis will also activate the muscle and create an allergic reaction.

And they will nourish one will notice the other. So if we want to look a very interesting slide is to see what happens when a cell goes under crisis. That's really what happens in every cell that doesn't feel safe.

Everything that goes into glycolysis, everything that goes into crisis. And really muscle activation is a sense of crisis. That is it's, you know, it's over alertness.

It's over anticipate. So in one level it can enhance an immune response. And then certain people with allergies have less cancer with asthma. But then it will really drive inflammation.

So this is a normal cell. When the cell feels safe it can it normally uses glucose. Glycolysis is inactivated p53 which is a big cancer regulating gene is activated.

We get normal metabolism of glucose into one which will shut down. The mitochondrial function is not working. And we get pyruvate coming into the cell and we get normal metabolism.

Very efficient, very, very efficient.

Galectin-3, Cellular Crisis, and Cancer Metabolism

36 molecules of ATP per glucose but slow because we are in the time of no crisis, when we go into into crisis and

mix classical sense of always feeling in crisis, we shift to the abnormal metabolic, which is identical to the proliferating tumor cell, because the cancer cell is a cancer that so it doesn't want to die, it wants to survive, and it goes into this crisis mode.

We divide and divide and divide and divide produces and creates inflammation. So in this sense glucose is no longer used properly. P53 is shut down. So the normal production of of of ATP adenosine monophosphate kinase is shut down.

And then mTOR one is activated. We get a sense of hypoxia like a proxy on a cellular level and a proxy like we don't have enough air and a proxy like we feel in crisis, right?

Many of the people with muscle activation know it. You get a symptom and the mind goes into crisis. Oh my God, oh my God. In this contraction, sympathetic biochemical is exactly what happens here.

And then pyruvate gets shut down and you go to glycolysis very fast. Metabolism hundred times faster, highly inefficient two ATP for every glucose a lot of lactic acid, a lot of acidosis.

Again, you shut down the acidosis. There's no oxygen hypoxia inducing factor gets overly stimulated PDK phosphate gets stimulated by Virginia's get blocked.

Nothing comes into the mitochondria. So from a strategy, you know from a natural classic auto molecular, you want to make sure you have B1 and B12 and thiamin know thiamin and alpha lipoic acid.

But you also want to make sure that you shift into a state that is not this survival. And this is why it is really important, because it will affect what will happen in cancer and we that affect what will happen in our life.

And in my book, The Survival Paradox, I have a story about a woman we just can't with her stage four lung cancer and she's in a survival mode. She's in a crisis and it's affecting her cancer.

And when she shifted it, it's remarkable for how many years she lived. So in this way, muscle activation is that this regulation of the immune response has, causes a heavy price.

And that's why part of strategy for muscle activation, a part of strategy for cancer is detoxification. You know, we have the cell has a choice, you know, if it wants to function normally or it doesn't want to function normally.

And there's no better. So many reasons for this. We all know it is like an emotional psychological gene expression, toxins, certain things. We don't have so much immediate choice, you know, if we have a certain gene exposure.

But we have a choice from an epigenetic point of view, are we going to activate the gene or not? But if we have a high load of toxins and heavy metals and and multiple system that are not functioning well, it will affect our ability to have a well-functioning but, body, but also to, to prevent cancer and to and to prevent the inflammatory fire of cancer, because we know the more aggressive cancer, the more it consumes glucose, the more it goes into this diagram that I showed the abnormal fast.

Right. This is what Pet scan is about right. They give glucose and cancer lights up because it's consuming a lot a lot of glucose. So that's a very basic relationship.

And whatever helps us to balance out muscle activation will naturally help us in a in, in or in the cancer prevention strategy, with the key thing being advancing the survival products.

And that's why addressing galectin three with more effective prospecting is so fundamental to the strategy. Now we are just publishing a paper on biochemical relapse of prostate cancer.

And it's very interesting because it relates to our to our subject. So the uses the most effective was picking it developed in people with prostate was taken out because of cancer.

And plus it's just an example. But it's very easy to follow up because the PSA is a very reliable market. When you don't have prostate you have no PSA.

PSA shows up, you know it's gone. So the prostate is taken out and then it starts coming back. Biochemically sometime you can see something. You don't see it. It's called biochemical relapse.

That's our third study. It's a multicenter study. And we published that after six months, about 80% of the patients for 80%. It is a slow down. The cancer growth stopped.

It or the cancer went down. That's remarkable but interesting. Some people who didn't respond out of the 20% decided to continue. And they responded after one year, and we spun enough for years.

So it took them a longer time to change everything that we were just demonstrating. And then we took the people who got results from six months. So study within 60 people, six archeological centers in Israel.

So we took the people who got results for six months. Probably not close, close to 50 people. And some of them decided just to buy the product, didn't want to read the word but to study.

And then we followed them for another year and this we are publishing now, so I can give you the exact data. But compared to the baseline 18 months earlier, 90% had a response.

This is 18 months. You know, there are very few treatments. You know, ecology that works for 18 months, right?

Detoxification, Toxic Load, and Protective Strategies

And actually make you less inflamed. Why am I giving. This is an example. Because we regulated the survival response. The side effects were less joint pain, better memory, etcetera.

Right. What we are looking when there is reduced inflammation but and and is is part of it. We are we are not the most is taking doesn't kill cancer. It allows the body to properly respond to the cancer without creating an inflammatory response.

And this is really our goal with Amica to regulate, to take care of the problem without creating an inflammatory response, because the inflammatory response is, we know, for example, in the gut will create leaky gut.

And then the whole autoimmunity in and gut brain, the the connection and effects on airway inflammation and pain. And of course we can see connection with galectin three in the gut.

And then with aggressive bacteria using it, to adhere to the lining. And we can see it in the brain in disrupting the blood brain barrier, very similar in potentiated driving post ischemia, inflammation in the brain tissue.

So it's fascinating that the very basic mechanisms are showing up in different places that are just expressed in different ways in different molecules. You know, it's the macrophage.

You know, a circulation in the microvilli in the brain, you know, and, and the, the post patches in the small intestine, you know, it's, different immune responses.

It have multiple functional walls. It we are now much more aware of this brings together so many pieces we've been talking about on this summit. And I just want to recap for our, lay people and brain fog people that we we've talked a lot we're talking a lot on this summit about how we live in this toxic world, the epidemic of mold there, piles of studies about how carcinogenic, aflatoxin, okra toxin and zero unknown are.

And it's a concern for, I think, most people living on our planet because we don't live in a pristine environment anymore. And so I love the slides that you showed.

I was familiar with the tour, the Ampk pathways. This is not my best area in biochemistry, but I knew at least from that that pathway, that reducing sugar, reducing, the exposure to the, estrogenic compounds and dairy and plastics, reducing emfs all these things that drive those pathways help reduce cancer risk generally taking us even more upstream to where galectin three has this down, trickle down effect.

So if we can get even more upstream to that galectin three with things like citrus pectin, then we can really help shift that cellular metabolism out of this survival stage.

The survival paradox state, where we're burning a lot of glucose and driving those cancer cells back into what I think of as an autophagy state, which might lead to. Exactly.

But right. And that's why intermittent fasting, for example, is so important, you know, but, you know, if I, if I'm going to buy this, this slide again and show this so so it's interesting.

So we really have to understand that galectin three is working outside the cell in the connective tissue in the inter extracellular and in the receptor, the insulin receptor.

That is disrupting because it's activating the macrophage. I don't have this slide here. And maybe I have in one of my other slides. But I don't want to to to get people to confused.

So think about outside the cell that these macrophages are becoming inflamed because they're getting a message of crisis from galectin three. Or they are starting to excrete galectin three.

It disrupts the membrane. And then you've got everything going on. So one phenomenon of compound that is really unparalleled is a compound called her Nokia.

That's really fascinating. And it relates. So people who take on Nokia often will feel, wow, my brain fog is gone. You know, my my mental clarity. And it's very important for neuroinflammation and really is a study that amazing but also in cancer.

And it's synergistic with practically if you look at the literature there's not a lot of human trials only unfortunately animal trials because there's no money to be made from an alcohol from pharma.

I published the only human data in cancer actually with intervention alcohol, which I don't do anymore. So what were Nokia does where Nokia can differentiate a normal cell from a consistent, the cancer cell, it will put oxidative stress on the cell and kill it.

And in the normal cell it will make sure that that that it's become an antioxidant. So in the cancer cell it will block mTOR one it will block Ampk. It will block ECT.

And it will activate PTEN and p53. So totally normalizes the cell. Now if you look at the Nokia's data, it's untamed microbial anti-fungal, antiviral, almost every every pathogenic organism. Why?

Because in times of infections these cells also get dysregulated. So for example we have now seen in spite of my new recommendation, I recommend NTP with a local for neuro inflammation.

And we're getting insane, insane feedback. I've never expected. And but the reason is that we are addressing the abnormal, survival driven upstream inflammation, and we are addressing the intracellular normalization of mitochondria.

So berberine does some of this but more specific here. And then curcumin does some of it. Well not only just unparalleled because it also moves the brain from a side, excitatory glutamate phase to a Gaba phase.

So it will take on okay, I'll feel very relaxed and focused. So what happen if we can feel more relaxed? We talked about last time the muscle response goes down.

You know, the anticipation of excitatory tension just goes down. And in this sense, yeah it's really it's really it's really remarkable. Let us an example of a compound of course.

But the idea that we have to see where we are and how we can be creative about addressing it. Right. So we talked about toxin. Then how big is the role of the gut.

And then how big is the role of neuroinflammation. And how big is the role of mitochondrial function. And so when we put the different pieces we can really make things work.

And often often and mycotoxins are huge. You know, I'm doing work on, on a glove for detoxing with with glyphosate. We're getting great reduction. But we're also seeing a milder reduction in orca toxin in all the subject, you know, but the all these we know is they all relate to each other.

I know we live in a, in the world where we are affected by but by so many places. So these are very important strategies which are other often overlooked.

You know, ecological treatments. And they are actually essentially non ecological treatments. So when somebody has a big toxic load especially mycotoxins which tend to be, fat soluble.

So this is what therapeutic offerings this comes in and what I can get in one treatment of the uptake of red is you can do as many as you want. You will never get it.

Because what happen? We are filtering out all the oxidized lipids and the toxins that are bound to them. And specifically in my approach, integrated with phosphatase alkaline.

So I'm exchanging, you know, normal for cell calling with fat soluble, you know, soluble tokes that are bound to the membranes and the machine just pulls it out.

So it's interesting because the same treatment will make immune response better to cancer. You know, I used to use a lot I don't just know how to get BCG vaccine, which is giving into a intradermal, and it's it's really effective and inexpensive.

But people with metastatic disease cannot produce an immune response. You know, we just you do a skin test PPD, you don't see it. Then when you do a few raises and you're cleaning the blood and you do it immediately, suddenly you get an immune response, right?

Because all the inhibitors of the of the immune system that the cancer is excreting and all the toxin that, these regulating your immune system are being removed.

So this is a more radical approach when somebody really with no other, you know, choices left. And but in general, that's what we're trying to do in a milder way.

And I think that for the long haul, Covid and people who have side effects from vaccine is the same category. It doesn't matter. What is your opinion on this?

This activation of the immune, this regulation of the immune system is very much related to people who have more. People have a high toxic burden. It doesn't come out of the blue.

You know, it's remarkable to see some people with the high micro toxin level and the normal logical diseases have. I see people in the same counties showing up with neurological diseases that are supposed to show up, but when?

Only when you're 20, after, you know, after this, after these incidents.

Brain Inflammation, Circulation, and Recovery

So I think that the strategy has multifaceted benefits. And I want to so to pull some more pieces together for people and, I wanted to share some things around the hinoki oil, because that may be a new supplement for people to hear about.

When I'm looking at cases, I'm always thinking, what's the pathogen load? What's the toxin load? What's the stressor load? Whether we're talking about emotional, mental, physical stressors.

And some people have a when I share my story, some people have a hard time believing that these things happen. But it I had such terrible glutamate issues doctor lives that even having a couple PS would make me feel and they have some glutamate make me feel like I had fireworks going off in my brain, and her Nokia was one of the things that quite helped me.

And for people who haven't heard of this, it's magnolia bark extract. But the key with it is it has to be a very high grade, very pure quality extract, and you can find ones that are the 25%.

It's not inexpensive. It's it's that's costly to make, but for you for I knew who you were I tried several and the only had no kale that made the difference for me was the, the clinical synergy.

And I noticed a big difference with the purity. And we're going to I'm going to link to that so people can find it on our Summit Resources page at Mast Cell three.

Six sitcoms Summit. And you know, I only looked I also looked this important. So thank you. I was talking to to my dear friend Eric Gordon. He was sharing the same feedback because I'm so cancer focused and actually developed an intravenous treatment for this.

And then, you know, you're focused on one area. And but Eric was telling me, you know, it's it's helping is the micro toxin never inflammation. You know I think I'm seeing it, you know, and and yes, it's, definitely we actually published, I mean, our, our publication on the local, mainly in the field of cancer, but also we've published the synergistic antioxidant benefits with what effect it was victim, you know, with the research and other stuff.

So yes, it's really supported the beauty and the excitement for me and why, I mean, in a, in a mission to share this now is it this synergistic effect we can create us, in so many diseases, in so many conditions and with the I just want to come back to the Hanukkah offer for just one moment, I've found that people we have so many sense of humor in this population.

But I found that if people when people tolerate CBD, they tolerate pay, they're going to tolerate the Hanukkah. And that's the pattern I've seen. And it's really about bringing it in for sincere people at the right time.

But I love I love that product. So we know that we we're all living this toxic soup now. And we have these emfs and we've got 5G and we haven't gotten 5G on my street yet, and I'm hoping I'm close enough to the woods that I won't get zapped.

But this is a different world. We were living in a hunt than 100 years ago. In my mind, we need long term, lifelong detoxification strategies. We don't want to wait.

And not everyone with mole toxicity develops cancer. I've been really lucky so far, I think with my own toxin load, but I have had, a good number of people came through and either it had cancer already or they, they developed cancer before they were able to get these toxins out.

Can we talk in the big picture in terms of this? I really want people to be thinking about not waiting till cancer happens and then having to treat it.

And there's a lot that can happen there, which is great. But also how do we take care of ourselves so that we don't go down that road and we can stay off of that path?

Right. That's a great question. And it can be more challenging for some than others because we get our genetic predisposition and, you know, and with, you know, families with a deep family line of cancer, which is not always genetic.

Sometimes they lived in a toxic area for multiple generations. Right. You can see. And suddenly the people who moved early on, you know, I okay. I mean, I grew up in the street where we had dudes literally 50 yards from the house where the huge of the high high, you know, the electrical wires, the huge ones that are like, you know, 100 yards above the ground.

You could hear them, you could feel them. Every single house in the neighborhood had cancer. We had cancer of the adults. We there were at certain point they were removed.

But definitely I got some of them in my childhood. So so there are different levels. So one thing is we got to address that. We had got to address Galatians three on an ongoing basis.

I can't emphasize this enough, and not because I developed this and I've done it for almost 30 years and have a lot of the discoveries, because it really addresses a fundamental pattern of destruction and aging and driving chronic inflammatory and fibrotic diseases in cancer.

The other thing is, you said we have to constantly address toxins. So one is eating well, drinking good quality water. But the sad part is that we cannot control it.

If there are airplanes flying above your house, you're getting MTBE products. If you live in a flat area and somebody's spraying glyphosate ten miles away, it's going to come into your water.

So we have to have a daily regimen where we clean our our pesticide and mycotoxins. So pick the soil does some of this. It does actually a lot of it also has systemic effect.

Like for detox is a great addition and we are seeing the combination. But I think also taking get taking good care of your microbiome because the microbiome is really our synergistic symbiotic God.

You know, it allows us to absorb nutrients. It allows us, you know, it protects the integrity of the gut and also to look what creates what create toxicity in our life, in our mind, emotionally, psychologically, it's all mixed together.

And we have to realize that because the cell has a choice to go into a mitochondria, a normal function, or an abnormal glycolysis based crisis function, so do we as people, every second, every breath, every.

So we have the choice to just let go. And when we let go. And specifically for Micha, it's not only the anticipation psychologically, the it's the biochemical response.

Let's call the muscle cell is not being activated. And it's tricky. It takes time for people with very strong mCAT tendencies. You can feel that you are changing your mind and changing your habits and the physical level, you know, from working with so many people will come sometimes right at the end.

You know, it's like the last curtain that will be unveiled and suddenly the room is full of life. For some people, it happens right away. We see it in, in, in, in meditation and hitting retreats.

How it can happen so quickly. So we're talking about we have to keep detoxifying all the time. It's not something that we do just short term. And I really like doing some of these things and doing sauna.

And we're also talking about the role of our mind state. Our stress states are nervous system are energy. Keeping those layers clear. And I just want to also realize, for people who didn't watch our first interview, that, just to touch on that, if you're using the modified citrus pectin, it has to be the very small size.

So we're going to link the kind that you're talking about again on the Summit Resources page, because there are a

number of them out there, but they're not the kind that was used in your research.

So we'll have that listed too for people. And you know, I want to one more word about it looks ification because we detoxify all the time. Every time we accelerate or detoxify, every time we inhale, we know we show.

So there's a dialog between detoxification, which exhalation takes twice as long, is inhalation and nourishment. But there's also a more concerted effort of detoxification.

And for people who are relatively healthy, the best times, if you can, are in the spring and in the fall, and detoxification really has stages that you really need to prepare.

It's a whole process. You know, I write about it in my book in the chapter of detoxification and make sure that that I that I include this chapter. I mean, I have a diagram on it here, but I don't I don't think we have I think we've talked long enough for this time.

But really, when you detox, if I want to prepare you, I know what do you want to get rid of? You want to expose what needs to be exposed. You want to bind.

You want to help the discharge through the liver and the elimination. And you got to give support, nourishment, unification, circulation, balancing. And these are all the steps of of detoxification that if you do them you will have a smooth detoxification without crisis.

So before we wrap up, I also know that you had some tips for people around brain inflammation, around brain chemistry to help them be less reactive. And there's that role in that brain inflammation and the type of sensitivities that we see.

Can we just briefly touch on those. Yes. So as the brain goes into so putting the gut brain connection aside, when the brain goes into a crisis mode, into a survival mode, it through galectin three the blood brain brain is disrupted.

Molecules, pesticides, micro toxins penetrate into the brain and the activates the immune cells of the brain. The microglia. The microglia can be affected by toxins, but it's directly affected by collecting the Alzheimer plaque has ten times the concentration of galectin three compared to normal tissue.

But interesting when we have perfusion injury, when we don't get blood to the brain for a fraction of a second, then this will be a stroke can be just, you know, we looked at our neck for a second.

You know, our blood pressure spiked. We didn't have enough blood supply. The tissue will respond with microglia driven inflammation. And that's what damages the brain.

And we have shown studies have shown studies published this year that it's driven by collecting three in modified seed respecting we reverse it. So when you take modified it was taken in here.

No cure is a combination. You don't need a lot for no cure for for for brain function. One capsule a day of one of your. If you want, you can do one twice a day.

It's usually enough. But if you combine it with a full dose of motivated prospecting, you will see a difference in your in your in your brain function.

And in the same time you want to support the circulation to the brain. Essential. So any herbs, botanical, natto, kindness, lumber, kind of anything that helps you get better circulation to the brain.

The health of your neck that it's opened, can be you know, if we're making it, it can be devastating. And so all of this will really, will really affect because the brain is spoiled, it wants to get it supply all the time, you know, and, so in this sense now inflammation is a treatable condition, you know, especially when it comes to memory in Alzheimer.

It's really a treatable it it's it's not something that cannot be treated because if we improve circulation, if we reduce oxidative stress, if we shift the body and receive the brain cells from an inflammatory state, the normal state, we will see a difference in our brain function, which is a wonderful hope for people because I know from my own health experiences what it was like to go from being a star academic to not being able to read a book.

And I got my brain back and I'm able to do this work now and, read complicated research literature. And a lot of what you're talking about is what helped me recover getting the toxin load down the the pathogens actually improved mostly on their own and then the stress state and the neck.

So I have, Chiari malformation and some issues here. And I get lymphatic drainage every two weeks, and I have my head in my bed raised up, so I get good drainage.

It's made a world of difference. I just want to thank you so much for the work that you do in the world, for how much you put out there. And, it takes we need practitioners to have the kind of dedication and passion and excitement to help us solve these kinds of complicated health mysteries with the world that we're we're living in.

But I know that we're doing it. I know that you're doing it. And, thank you from the bottom of my heart for everything that you do. Thank you. Thank you for the opportunity for the for the amazing work that you're doing.

It's an honor to be part of this summit.