How To Break The Cycle Of Neurodegeneration And Finally Heal Transcript

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Introduction and Background

Welcome. Isaac, I am so glad that you agreed to be part of the M. S. and Neuroimune Summit. I really look forward to our conversation and so with that, I'd like you to introduce yourself and explain why you have this interesting area of expertize.

Yeah. First, Terry, thank you for inviting me to talk about such an important topic. In my background, I'm a native of Israel. I'm in. I went to medical school in the Tel Aviv Medical School, graduated in 1986.

I'm a little bit of an old timer, and I had an interest in complementary and healing approaches very early on since being a teenager. So I practice Taekwondo yoga with the yoga teacher, Noam Gyatso.

I learned Chinese medicine while going to medical school. So when I graduated from medical school and I did my internship, I knew I'm going to to to pursue an integrative model and holistic model.

It was my lifestyle, my, my, my philosophy. I came to United States. I did a master of science in Chinese medicine. And then I studied vertically different healing methods chemical, ethical, homeopathy.

For years, a lot of hands on work got very involved in meditation in a very deep way for decades, a lot of time by myself, every year in the mountains, a few months, a year for 20 years and for ten years have been meditation, have been a work.

And so I have this very emotional, disciplined, holistic approach. My focus is on cancer, on inflammation driven diseases, and on how to cure illnesses.

And while doing all of this, I'm also a bona fide researcher with an AIDS grant and publications. And it's part of my work with the inflammation is with the survival alarming proteins.

And I discovered a way how to attenuate inflammation and fibrosis, which which becomes very relevant for for neuroinflammation in the nervous system has always been of great interest to me.

If I would be just a conventional doctor, I'd probably be a neurologist, but maybe with internal medicine. But, you know, I hold in a holistic approach.

So yeah, it's the view of the nervous system as part of your whole body system, as part of a digestive system, of your mental digestive system. It is present in Chinese medicine is present in my thinking for for for a decade.

And a thing, as I mentioned to you in one of our conversations, we had a Chinese medicine study group in the nineties and we were projecting this going to be an epidemic of Alzheimer and dementia and memory issues.

Is part of the weakening of our digestive system. The weakening of the earth element of our nourishment is part of having over over busyness. So we can't really digest properly.

And it is it's that's how it looks right now. And the reason why this is so interesting, because actually something we can do about it, you know, that we can actively and take take a stance and try to to mitigate change the outcome.

That's really your goal when you do this. That's my goal when they participate. I love this. And, you know, I got your book, The Survival Paradox in read that.

And I really appreciated that.

The Survival Paradox and Galectin-3

We talk about the foods that we're eating and how that has a big impact on our health. So let's talk about that survival paradox. Can you explain that to our listeners?

What is that? What is that? The survival paradox is really introduces a new paradigm, you know, understanding of health, of disease, of our life. And the paradox is that we are wired, we are built to survive every cell in our body, innately the drive to survive and the action we take to survive the same action that actually causes us inflammation, fibrosis and drive diseases of all kinds with a lot of emphasis on narrow inflammatory diseases.

So because it's built within us, it's automated within us, within a fraction of a second, through the sympathetic system, through the autonomic system, which is autonomic, we can control it.

And we go into either fight or flight fight, which equates biochemically to inflammation in flight or fear of flight. That equates to creating isolation, hiding and creating a shield.

We then creates both emotional isolation and psychological isolation, but also also this shielding is what creates fibrosis, which ends up causing organ dysfunction.

So I think. On for a moment so everyone, when we're hearing the word fibrosis, think of that as scarring, thickening of the scar tissue in the lungs, in the liver, in the heart.

That's that fibrosis term. Now back to you, Isaac. And in the brain, it's a little bit the structure would be different, but it's similar. So what happened is that when we work with the sympathetic system, we can take a deep breath, we can relax, we can do yoga or taichi or music, whatever, allows us to go to a place of balance, of safety, of harmony with the survival response just melts away, at least temporarily, and we can shift back.

We biochemically, we are triggered to survive. There are certain proteins called alarming proteins, proteins that sound the alarm. And one of the key ones that I'm interested in, Galectin three, which is about 10,000 published papers I coined it, is the survival paradox protein because it instigates an inflammatory response, a fibrotic response and an immune dysfunction response.

And all of these would either for some people it would go through most of the inflammatory pathway, through others, through the through the fibrotic pathway, but eventually the same drives to protect us will end up causing, as you said, skull.

And skull from a functional point of view is a nonfunctional tissue. So it happens in our body and it happens in our brain. And so when we understand this movement, when distended, what drives it?

We now have an opportunity to change the outcome and either by something as simple as blocking Galectin three airways with modified seeds, respecting that they've done so much research on.

And there's published research specifically on Alzheimer plaque and on and on their inflammation and other nearby inflammatory diseases. And also to change our lifestyle, what we eat, how we think, how we feel, how we respond to the world.

Outward looking, always funny, inwardly. So I want to stop for a moment. Did I hear you say that with a modified citrus pectin that you can block the Alzheimer's plaque?

So what happened? It blocks Galectin three and and Galectin three. So if we look if we look at newer degenerative diseases and some of them have an autoimmune component of causing an infectious component, viral components a little bit more more complex.

But if we look at it in general, it is it is really is subcategories of neuroinflammation. The other driven by high level of oxidative stress of inflammatory CO, both of them driven by hypoxia, by lack of oxygen.

We then intracellular lee will create any toxic response and there is different factors. Hypoxia inducing factors into one and the cell no longer function normally from metabolic point of view.

So if we take the brain and we study the brain with the very basic models, it's called perfusion injury reperfusion, which means you cut the blood supply and you turn it on.

That's something that happens during, for example, surgery when you have a heart, lung, lung device. While they connected that, what happened with the vascular surgeon, you have to shut down the circulation to certain parts of the body.

And the organ that is specifically sensitive to it is the kidneys in the brain. Interesting. In Chinese medicine, the brain is the tissue of the brain is controlled by the kidneys.

So it's interesting. So you have this very short disruption. The buddy. Oh, my God, I'm joking. That's a classical survival response. Galectin three comes up.

So if you look at brain tissue and you create this model where you shut down the blood supply and you restarted, which will happen in life doing strokes during the day, but also during times of stress with a little bit less blood supply coming to the brain or there's a lot of of it.

If pressure in the brain feels like it doesn't give enough oxygen. So when you look at this, you will see that what happened is Galectin three gets triggered, a inflammation is produced when you apply modified with respect to this tissue, you reverse the damage by blocking Galectin three.

So for example, the Alzheimer blood is 20 times the density of Galectin three compared to normal, normal brain brain tissue. And so it's not surprising to you because the brain can't afford to be under danger.

You know, it's, you know, we always maintain energy supply to the brain. You know, we take it away from muscles, from digestion, from other organ. The brain is very demanding because this amazing supercomputer that nothing is as close to it that has to run everything in, you know, a body and a lot of things.

It does it. We actually don't know even what it does. Yeah. So in this way, there's an alternate energy system with whiskey toned bodies, so the brain has to survive at any cost.

And that's why it it's sensitive to to a survival response to an abnormal survival response that will drive inflammation. And that's why the smallest attenuation in the brain, we have very deep consequences in our body.

And we will see a lot a correlation between what happens in our body. Let's say we take our immune system in the cell, typically the cleaning cells, the macrophage and the mike and the microglia in the brain.

They're really like, you know, brothers and sisters in microglia get triggered, among others, by Galectin three, by a sense of danger. And then they get turned on on a chronic basis.

Exactly what happens in sepsis have shown in my research. In sepsis it's exactly the same.

Neuroinflammation, Brain Barriers, and Toxins

And then once you get the inflammation running, then we then then you get in trouble. Galectin three is running amuck in the body and also in the brain. Yes.

And what does it's like the shuttle. So why is to be so important? Because it senses a problem. It it has these receptors. It can bind to different ligands and it can either deliver them to the problematic tissue and or it can go to

the problematic tissue and there it can bind to these lichens and can bind to the cell surface.

And these can be inflammatory ligands, immune disruptors, sticky molecules that great like thrombosis, stickiness. Mm hmm. Well, it all a old growth factor that will grow blood vessels and in which eventually, as part of the growth process, will create damage and will create fibrosis.

So in this sense, a galectin three mechanism of repair is is inflammation driven and results in fibrosis. It's not a smooth process that leaves no after aftermath.

Now, in the brain, do we see fibrosis in the brain? Is that the increased Alzheimer's related plaques that we might see? Yes. So it's not it's not it's not the same structure.

Exactly, but it's exactly right. We will see tissue. It becomes dysfunctional, definitely. And in the end, it's not in the in the brain. Everything is a little bit different in no structure.

And I'm assuming that in the MSA neuro immune patient, so many of the other rheumatologic diseases or having fibrosis is elsewhere. And so in the brain this might be with the increased amyloid and I assume probably also the accelerated atrophy in brain volume loss.

Definitely, because the definition of of of of tissue dysfunction and the and what's interesting is that when there's a lot of these processes have the potential to be reversible.

Okay, so let's what can we do to either stop it or reverse it. Even if it's so? I think and again, all this prevention is easier, especially when the brain is the brain is is slow to recuperate, but it is, you know, the myth that the brain cells don't don't change and don't grow.

And we already know that the plasticity of the brain stays even the 78th and or decade even later. So I think we really want to recognize the role of new inflammation and then understand the very basic mechanism we have to support blood supply to the brain and blood supply can be disrupted to the brain because of this sclerotic disease, because of certain, you know, hyper viscosity.

So many times it can be structural. You know, if we have blockage, you know, Oxi proteins, there's no good supply coming from the vertebrate out doing the breast milk into the brain very common.

And so we want to make sure that there is a good blow. This is a good flow of blood supply to the brain and there's a good drainage of mechanical is really important.

And we have to reduce anything that can drive narrow metabolic and pressure and also no immune pressure, which is really an expression of this. So the immune system will use inflammation as its tool, right?

It will use metabolic changes. It's the tool. And and so we need to try to regulate in the moment, we shift to a place of safety. Many of these pathways just relax it just get the they just melt away.

You know the allows the normal pathways to really come back because a cell responds based on what it senses from its environment. If it senses from the environment that there is lack of oxygen, there is danger that there is attenuation of normal function, it will go into a protective mode and this protective mode is very damaging.

So either it will try to produce energy faster through glycolysis, which is very fast, 100 times faster than normal energy production, but extremely inefficient, 5 to 6%.

So two ATP is compared to 18. So actually, if you think about how much substrate you need to use to get 100 times more energy, two time, 2000 times lots of byproducts, lots of acidity, lots of lactic acid and so anything that will help the brain will help to to mitigate it.

And when we want to understand what will help the brain is one thing that will help us generally will be good for the

brain, you know, but Alzheimer's is considered like diabetes type three.

So any metabolic imbalances will directly affect the brain, there's no doubt, and will help in all conditions to various degrees. So that say this one one area, we have to really introduce a mean improve circulation to the brain and we have to keep using the brain just like we use the muscle.

We have to exercise the brain while we allow it recovery time. So the very basic thing, it's so basic many of us fail to do it is good sleep. It's a good education is stress is stress control.

And then it's using something like this. Will block will block. Galectin three. This is an example. Then we want to see how can we move the brain into more parasympathetic by definition, not necessarily.

Actually the pathway never protective effect. So when the brain gets into a new excitatory effect, a lot of glutamate, a lot of stimulation, it really damages the brain because of this, where until just I think you already mentioned it and that's why you see a relationship between substances that pushes the glutamate as it pushes new excitatory pathways in brain damage, if it's ADHD, if it's autism, if it's there were logical diseases.

And so we want to attenuated. So there are some compound which I'll talk about in a few minutes that have specifically the ability to shift it to a level protective mode from glutamate to GABA.

But we also have to recognize what is causing our brain a sense of danger in itself. That sense of survival in crisis. So we talked about circulation, inflammatory pressure, but one of the ways that the brain regulate itself is the brain's boundary, which is which is very similar.

It's very similar to what happened in the gut. The gut we get the gut lining is the gut lining get disrupted. We got leaky gut. Big molecules come in and we get immune response, inappropriate immune response.

Now it's much more acceptable than 20, 30 years ago. The same thing happened in the brain with the blood brain barrier. So Galectin three is not the only one disrupts the blood brain barrier.

It allows a bigger molecule that not supposed to come in to come into the brain and you get an immune response that's in there. That's really the new immune issue.

And the brain, the macrophage of the brain, the micro glia come into play. They want to clean up the mess and the clean up. So that the Galectin three opens up the barriers to the brain and lets the immune cells in and then the microglia are more active in the immune response in the brain.

Yes. And it's not necessarily that it led to molecules that are immunogenic and then it likes heavy metals coming it late. So that's one compound. But we can't isolate not only only galectin three, we are bombarded with Mycotoxins.

Mm hmm. And again, mycotoxins are in areas that are oxidized, that are in lipid soluble area with the brain. There's a lot of phospholipids just just like the gut.

So and you've got heavy metals, we've got environmental toxins that devastating to the brain and we got pesticides and they all work with each other and we are bombarded with pesticides.

There's one thing that is of great concern is pesticide, because if you have mold toxins, you can put up a field there, not enough. You change the house, but you can't escape pesticides, at least not right now.

Even if you eat organic. Everybody is blamed for that because we spray £330 million of glyphosate the year just in the US. If they get it illegal in many other country.

It's not affecting the outdoor industry in our country and it because it's water soluble with water with rain, it can going in a parallel field for miles.

So glyphosate is very similar to glycine, the smallest amino acid, which is an immune and never protective amino acid and it switches with it because it's so similar.

And then it becomes interior excitatory. Also, it helps to deliver certain heavy metals and disrupt absorption in the gut, and it will do the same through the blood brain barrier.

So now you've got pesticides and toxins that affecting our system. And these are this is an ongoing issue that we have to address. So all this trouble is in our brain.

What do we do? So, I mean, putting aside the different issues like special exercises and special methods of of, of life stuff and really put it aside, we want you to address one.

We want to address Galectin three by taking more effective perspective, by taking picture. So we want to try to, in an ongoing basis, clear pesticides and toxins from our body.

So interesting, all the people urinate, alginate is modified. Two perspective. They are very powerful collectors of heavy metals for environmental toxins.

Mm hmm. I've done a lot of work in the last few years on finding a solution for removal of glyphosate because they recognize they overlooked it and it's so important.

So I developed a product called Life for Detox in Glide for Detox. We are just finishing the second layer of of studies, so we have no more subject. And except for one outlier everybody, we are seeing significant reduction in glyphosate.

I'm very excited because we may have a solution and some of the components in the formula have specifically benefits on neuroinflammation and mitochondrial function.

A full week it from from from from Sheila G. So we want to address this and we want to support the regulation either ways with herbs, different herbs if it's procurement or quercetin or berberine, a key key key component is hinoki, all from Magnolia Bark because it has the ability to penetrate the blood brain barrier and it shift glutamate into GABA so it moves from an excitatory to a normal protective effect.

It is a very good effect on reducing chronic inflammation, including within microglia do it is it intracellular effect and I'm apologies for the call and can be integrated with the extracellular effect of more perspective.

We have. We've published papers on this. It's one of the discoveries. Now we're talking to products.

Stress, Heart-Centered Healing, and Meditation

One is the pup dorsal, which is the modified citrus pectin. But then there's this other product you just mentioned which is protecting against glyphosate.

Right? The glyphosate, it's called Glide for Detox. It's a it's a formula. But the third component is we want to protect the sale interests. It only we want to shift the selling to normal metabolism.

So they are things like berberine the do it curcumin does it a little bit quercetin is innocuous is very is an amazing effect because it's from the magnolia bark and it is a multi-factorial effect.

See the researcher for not curing cancer. And you see a lot of research on an ocular, you know, inflammation, a lot. Again, it's gotten to the clinic as much.

You know, there's no incentive for anyone to spend money and doing clinical trials when you can patented but are not clear. When you take on ocular, you will feel your whole system relaxing your whole system like ceiling down, coming down.

So when we move our brain and our nervous system and our being into more of a parasympathetic, into more of a relaxed mode, it will naturally have an effect on our mental function and a logical function.

We all know that when we are stressed, it's harder to remember. It's harder to express this clearly. It happens to all of us, and as we age least my experience, it gets worse.

Yeah, absolutely. So you've talked we've talked a lot of stuff here. The sympathetic parasympathetic, the role of galectin three driving, the inflammation, the fibrosis in the role of modified citrus pectin to calm that.

And this interesting anti glyphosate product, which I'm thinking like Isaac, I need to check that out because you know, I live here in Iowa. I'm surrounded by people who are spraying glyphosate all the time.

So even in my organic garden, I know the rain is coming down with glyphosate. And it actually some of my subject are from Iowa in the study. Yeah, yeah.

It'll be an issue and, and it's an issue that nobody's asking us if we want it or not. It's kind of being forced on us, you know. It's been forced on us and try as hard as we can to not have that in our system.

We are we are absolutely stuck. No. Well, Isaac, well, what would you say the role of stress is for people who are listening to the summit with the messenger immune issue?

So stress is really a survival response. And then we are under stress on an ongoing basis and a different kind of daily stress of pushing ourselves is part of building endurance like we exercise and we do a little bit more and a little bit more of stress as part of we're doing something.

We really love doing and we are pushing this not always damaging stress of just being in stress, emotional, mental life. It wears us down. It increases wear and tear, brings up the level of Galectin three, but mainly it shifts us into a chronic sympathetic mode, which is devastating for our neuro endocrine system, for, you know, glucagon goes up and cortisol goes up and the IGF one goes up.

And then as a response, you know, and you know, you go, you've got insulin surge and you've got insulin resistance. And here you are affecting not only metabolism inside your body, but metabolism in your brain.

So the same basic shifts are so beneficial in so many ways and in many levels. A, you know, when you see a lot of studies showing that compared love and compassion based practices, health based practices are very beneficial for the brain.

They've shown UCLA has done amazing studies where they showed a document that meditated the long the longer period of time they meditated. Otherwise, the longer they meditated every day, and the more they are trained, it more benefits on the gyro in sulcus, the cells in the brain, the cortex.

They retain the structure of the cortex. And one of the reason why it is, is because we move in a place where we are less reactive and the reactive it ties back to our opening discussion about the survival probabilities, because this when we are in survival mode, we have to react and the reactivity is built very into every cell in our body.

Everything nobody wants to survive. It wants to take nourishment and it pushes away with it doesn't want. This is not mine. It's not good for me. Go, go, go away.

I want this. I want this judgment in aversion from a from meditation point of view. But physiologically, biochemistry, that's what happens. The only organ that functions differently is the heart.

The heart takes all the dirty blood from all the organs with the venous system says bring it on with open heart. Right. If it doesn't take the blood, we're going to be dead.

It needs the blood. It needs what the body doesn't want. It connects with the universe and it gives away clean,

nourishing blood. And only once it's done giving, it relaxes and nourishes itself through the coronary arteries outside of the heart.

Amazing. The only organ. So when we shift to this mode, when we start operating from our heart that we have a capacity to do not so simple to train, but profound in we sometimes we are on something, we are off.

Then suddenly we are not reactive, we are responsive. What do we mean? The same stuff that comes from the body that creates an of a negative reaction from a cell.

I don't want it in the heart. It's responsive. I have enough compassion to take it on because we connect with the universe and all this stuff we don't want serves.

This would to the fire of nourishment. And the nourishment of the heart is profound because there's nourishment through blood supply. It gets to every cell in the body.

There is nourishment through the electromagnetic field. The electromagnetic field of the heart is 100 times bigger than the electromagnetic field of the brain.

So at any moment how we feel in our heart gets to every body. We can feel it as we talk, and it affects the people around us and on the deepest level, the intention of the heart, which is taking it right through the blood.

It's taking it right? Right. We know that water has different structures, but it takes the right to the electromagnetic field and it takes the right with the intention itself.

In Buddhism, you call it the body speech in mind, and this quality now is affecting every setting that we're about, including our brain. And people can feel it.

They're really relaxed and the heart is open. Suddenly the memory works better, like when we need to remember something and we try to write, what do we do?

We just relax, right? And whoops, it comes back. So it's important to recognize the pulse. The heart and the heart does have its own brain, you know, tens of thousands of cells that have their own independent processing, not only the rate of the heart that is independent, but also the heart thinks.

And from a meditation point of view, when you are trained in this, so when you talk like, right, no more aware of it. So when I talk to you, I hear myself speaking from here.

I think from here I do not think from here actually feel it processing right here. And then it can feel my body is different. You know what bothered me 20 minutes or half an hour ago is not here.

Not because I pushed it away, because I'm operating in a place where it's all okay, when it's all acceptable, when it's all embraced and obviously the world needs more of this.

And that's why, you know, people like you and me talk about it. And the bad news is the world needs more of it. And the good news, when it's really dark, every small light, glowing liquid, I would say, makes a big difference because if it was full of light, it would make it.

We wouldn't need it, you know. But the brain is this amazing, amazing, you know, system that we know a fraction of. And so I think it's really important to be humble about understanding of the brain and to recognize that there is a reality there that is bigger than what we can comprehend logically, because the logical processing of the brain is a tiny part of the brain.

The brain is most active while we are sleep asleep. There's so many parts of the brain, we have no idea what they're doing. So and so there are there are different dimensions of understanding, the different dimensions of connectivity, and they are present everywhere, you know, and they are present in the past, in the present and the

future.

And when we breathe, when the air comes in, the molecular feeling, our mouth is connected to the whole universe in the past, in the present and in the future.

And it goes straight through the lungs, into the heart. So when we connect with our heart, we connect our infinite healing potential. That's what I call it, what I coined open heart medicine.

And in this sense, when we are there, the brain can really regenerate. And I've seen a lot of it in my own experience with the with the with Long-Covid.

It really affected my, my brain function. And it's when you connect with the heart that things really shift and in this sense that the very unique and meditation work, it's it's not just basic it's like mindfulness where when we truly let go, then our healing intentions come from this effortless place.

And so we are connected to this infinite source of healing and everything expresses out of it. You know, the people Judeo Christian will say, we are we are made in in the image of God, right?

That's the Bible in Genesis. So it means that every cell in our body has this divine quality. So when we connect with this in the heart, in many traditions symbolizes including in Judaism, Judeo Christian, they see God examines the heart in the kidney.

That's how it figures out in the kidney is interesting relates to the brain in Chinese medicine so that's really where you can figure out who we are, what is our intention.

Closing Message and Resources

So when we connect with this, it gives us an enormous source of healing. To connect with it, we have to let go of the survival response, which is very self-focused.

And then so one level, so simple, we blow Galectin three, we take a more effective perspective and we get the stories about people whose memory gets better and mental function gets better when they take more effective perspective.

Well, they're paying to chime in here. So I have spinal stenosis and I've been having more and more trouble with back pain. And as I upped my practice so I've discovered that my back pain is much, much less.

And just last week, I was able to stand for 90 minutes giving my lecture for the doctoral physical therapy students who have not been able to do for several years.

Isaac So but I was I was very, very impressed. So thank you so much. Yeah, I see. It's interesting. It's, I get lazy in the evening is a full dose there is something about the full dose that is needed so we get enough coverage because basically it's something that drives inflammation.

It just has to be blocked. It's so interesting. Wow. That's it's amazing story. Yeah. Okay. I could talk for hours with you, but we should wrap this up.

So what is the one message you would like to have all our listeners hang on to from this really wonderful conversation? I think that each of us has an infinite healing potential.

Not everybody is going to be a miracle, but anyone can be a miracle, truly. And when we connect with this and we relax into it, then every method we use becomes more powerful.

And within it, we have to address this imbalanced survival drive which kept us alive, which keeps us alive at a cost addressing. It's as simple as it's why I often say motivated was pain is the most important supplement and because

I developed it, I did the research because it addresses I got lucky.

Nobody thought it's so big, it was focused on cancer. And then I noticed inflammatory benefits. And then in the same time, every moment, every breath, we have a choice of shifting from a survival mode to a place of open heart and balance and nourishment.

And within it, the healing process is radiating and resonating inwardly within us and from was from us outwardly to anyone that needs it. And this interdependence we have just we have an interdependence between 50 trillion cells in our body, the interdependence between all of us.

That is beautiful. Now, Isaac, where do people find you. So they can look me up at the doctor? Elias de Elias dot com. I have a what I consider a good quality newsletter with the whole research team, and I really hope in later and towards the end of this year to start teaching more meditation and healing in the United States that more internationally.

It's time for me to do it here at home and share this decades and decades of training. So yeah, just visit my website and you will find anything related to me on the website and you can join the newsletter end and here will when I speak and what's my next lecture, etc..

So that's Dr. Elias only spell your name. I see that with that org, both of them will work. Okay. Well, this has been wonderful. Thank you so much, Isaac.

Hey, thank you. Thank you for doing this.