LADA: Unveiling Autoimmunity In Type 2 Diabetes Transcript

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Introduction to Autoimmune Diabetes

Hello, welcome to another episode of Reversing Your Type 2 Diabetes Summit 2.0. This is your co-host, Dr. Will Hsu. Today, I have a world renowned expert on autoimmune conditions.

Dr. Terry Wahls with me, and I think you're in for a real treat because a lot of people with type two diabetes do not understand that there are certain people with oral immunities for type 2 diabetes, not just for type one.

We all understand that type one has a has a underlying autoimmune link, but some people with type 2 diabetes also have that. So we will explore that certainly in this in this Summit as well.

So let me first welcome to Dr. Wahls. Hey thank you for having me. Dr. Wahls you're well known to our our audience here, you know, to our listeners and you have done decades of work in your in your fight against autoimmune conditions.

And tell us a little bit about your journey. Yeah. So I'm an interim medicine doc and in 2000, I developed a weakness in my left leg. I ultimately get worked up by my neurologist and we make the diagnosis of relapsing remitting multiple sclerosis.

I see the best people. I do my research, find the best MSA of the country, take the newest drugs. But three years later, I'm in a totally clean wheelchair and I'm only 48.

And that's when I go back to PubMed and I start reading the basic science. And I began tinkering, experimented on myself, and I will ultimately create a diet and lifestyle program that gets me out of the wheelchair.

And at my worst, I was unable to sit up.

Dr. Wahls' MS Diagnosis and Recovery

I had severe trigeminal neuralgia as being a brain fog and I thought I was destined to become bedridden by mental illness, demented by mental illness, and probably die with intractable trigeminal neuralgia.

Fortunately, I, you know, I redesigned my diet into the paleo diet. I was using targeted supplements. I was using electrical stimulation of muscles. And one year later, I'm out of the wheelchair.

My pain is controlled. My fatigue is gone. And I'm able to do an 18.5 mile bike ride with my family. So, you know, this radically transforms how I think about disease and health.

It will transform the way I practice medicine in my chief of medicine and my chief of staff at the V. A. encouraged me to shift my research program and begin studying my program, diet and lifestyle in the setting of multiple sclerosis.

And that's what I've been doing basically since 2010. This is what an amazing story. Not only you have the science to back it up, but also your personal testimonial.

This is so powerful, Dr. Wahls. I think a lot of our listeners today are wondering, why are we talking about autoimmune in the setting of Type 2 diabetes?

So I wanted to paint a picture for our listeners. And so so we know about 38 million people now in the US with struggles and lives with type 2 diabetes.

And and I mean the very title of this Summit is to reverse that type 2 diabetes. But most people are not even thinking about reversing in out of this, 30 million people is estimating maybe about 10 to 15% of the people.

When you look for antibodies and there there is positive antibodies against the the islet or the insulin or, you know, almost reminiscent of the type one diabetes, except that that the presentation is not as abrupt onset.

They don't present often with ketoacidosis. Right. So so there is this subsegment of population with type 2 and a lot of the physicians actually wouldn't know that they have autoimmunity, but in fact, they do correct.

You know, it my guess is if we would actually aggressively go, look, it's going to be a lot more than that. 10 to 15%. Yeah, I think our environment has so radically changed over the last 100 years.

We've changed our diet, our lifestyle, the foods we're eating, our toxin exposures such that autoimmune processes are increasing and we have a What about 20 million people with heart disease?

About 20 million, 25 million with cancers. And you just gave us the quote on the folks with type 2 diabetes. We have, I believe, another 50 million that have autoantibodies.

We don't have necessarily an overt autoimmune diagnosis, but we're developing antibodies against our tissues. And we will, if we don't get to the root cause, we will develop Hashimoto's thyroid disease, will develop multiple sclerosis, we will develop, as you said, autoimmune associated diabetes will develop psoriasis that is happening in.

And the other thing that is happening, if you get your first diagnosis so people come see me, they have multiple sclerosis and then I begin talking with them and we investigate what other autoantibodies they have and nearly all of them have other autoantibodies they're attacking other parts of their body as well.

And now, fortunately, you know, I began helping them, you know, addressing these root causes so we can turn off these autoantibodies prevent the development of other autoimmune diagnoses and often markedly regress the problems with their autoimmune problem that they came to see before.

And this this is so important what you just mentioned, that when somebody presents initially with one autoimmune conditions, the likelihood is that if you look hard enough and if you track it longitudinally over time, you get to find a cycle, right?

Absolutely. And you know, and we can look at what what is the time from when the autoantibodies show up to the diagnosis of the next autoimmune disease?

It's 3 to 5 years. And so I will have evidence of autoantibodies before I developed rheumatoid arthritis. I'll have evidence of Autoantibodies before I develop Hashimoto's thyroid disease.

Autoimmunity in Type 2 Diabetes

I'll have evidence of Autoantibodies before I develop lupus again 3 to 5 years away, which is why those 50 million people in America that have these autoantibodies, they're on track to develop another autoimmune disease.

So this, this, this knowledge is very empowering, right? So to know that to look for it, to know how to prevent it, and once they have it, how do we reverse it?

So let's talk a little bit about that. You started by mentioning that the conditions are increasing. These are immunities and you begin to attribute it to a few causes.

Can we just land there for a few minutes? Like what are the causes? Why are we seeing this this kind of a global rise surge in this autoimmune autoimmunity?

So so I'm going to speak from the sense of multiple sclerosis, because I know that so intimately. Well, the

conventional neurology doc will say, well, you have genes that put you at risk, then you have an infection, and then most people get that infection cleared.

Don't go on to get MS.. But some will and we don't really know what the environmental factors are. So we'll just give you details. We won't talk about the environmental factors, like, okay, so my approach is all right, so what's the list of environmental factors that have been implicated?

We know how far you are from the equator and how much ultraviolet light you get. So your vitamin D level and your sunlight exposure, we know your physical activity level.

If you're not physically active, your risk is much higher. We know early life stress adverse childhood experiences are increased in people who have autoimmunity.

We know that loneliness being isolated increases the risk. Oh no, now you just open up a whole can of worms there. So. Okay, so. So I have this radical, diverse, radical idea about backgrounds backwards.

My wheelchair get more, you know, every year, relentlessly worse. I said, okay, what I'm going to do is I'm going to chase all those health promoting behaviors.

I'm going to get back to my daily meditation. I was exercising and, you know, I saw pretty regularly so I could do 10 minutes of exercise. I was still going to church a daily that daily, but, you know, weekly.

And I'd been doing the paleo diet for five years for like, okay, how long is it going to take for that to, to make a difference? I didn't know and I was using supplements to target my mitochondria.

So I had the conclusion that mitochondria dysfunction was a big driver for disability. And when I redesigned my paleo diet based on the long list of mitochondrial focused supplements, that's when the magic helped.

That's when in a stunningly rapid sequence, my mental clarity improved, my energy improved, and my physical therapist said, Wow, you're getting stronger.

We're going to advance your exercise. You can do 10 minutes twice a day and then 15 minutes twice a day. And so for everyone who is listening, what I want you to do is step by step, begin to examine your what we call modifiable lifestyle factors.

This radical notion of eating non-starchy vegetables, eating sufficient protein. You know, I'm very fond of olive oil, have lots of olive oil. It's great for you.

That's a great start.

Environmental Triggers and Root Causes

And we can have a debate about the benefits of doing food sensitivity testing to see do you have an immune response to gluten, dairy, eggs, which are the three foods that I have a severe reaction to it and that's where I have people start.

Take Ellis gluten dairy out for a while and then see what happens if you reintroduce them. And often people, you know, they take it up, take gluten, dairy out.

I try to get them to take it out for three months. But in my clinic at the VAD say, okay, let's go at least two weeks. They take about two weeks and discover that when they reintroduced that food, the migraines came back.

Their symptoms come back. Their headaches, joint pain came back, their psoriasis rash became much worse. And that was super helpful. So teaching them to pay attention to their diet and lifestyle choices and what was happening to their symptoms.

So would you say that that nutrition is probably one of the sort of the key factors here. So. So modifiable risk factors. So I think diet and exercise are the two foundational that I really want all of my followers to embrace.

And while I'm very, very fond of the paleo diet, I'll ask the patients, what could you and your family do? Is a Paleo diet realistic? What? What are the foods that you could add?

What are the foods that you would like to reduce or eliminate? And to make this choice as a family? If that means that a mediterranean diet speaks more to you, that's fine.

Do that. If just doing the dietary guidelines for Americans speak to you, that's fine. Do that. All these are better than that. And they're all better than America.

They're all better than the standard American diet. Right. Which is. Absolutely it. And so we tend to do this as a family will not work. What will be a huge struggle is to say, okay, Terry, you eat your crazy diet.

Yeah. We're going to keep having pizza and beer every Friday night and we're not going to change our diet. That's a huge struggle. It's much better for the family to agree.

What are we going to add? What are we going to reduce and to make changes that the whole family can embrace? That's for sure. Well, let's turn our attention to the exercise part, because you mentioned diet and exercise. Right?

So what should our listeners be paying attention to when it comes to exercise? Well, simple things get up and move a little bit every hour. So I have I wear a or a ring and I'll get on alert like, okay, you've been sitting around too long.

So I stand up and I do some deep events or I go to the bathroom, go to the kitchen, have some water and moving every are very helpful. I also like strength training, doing aerobics, but it's a great start for everyone is to wear a wearable device that can keep track of your minutes of sedentary sitting time, minutes of low intensity activity, minutes of moderate intensity, minutes of high intensity.

And you don't need necessarily that much moderate or high intensity if you're just moving out. Some of my colleagues have gotten these wonderful walking treadmills that you walk about one mile an hour, so you're still getting maybe 6 to 8 miles of one in a day.

Okay. Low intensity, wonderful for their health. Or you can do the moderate intensity activity, but you just start tracking how many minutes of sedentary time, low activity, moderate and high intensity and gradually make changes.

So the world we're hearing here is tracking because without tracking, you don't know how much you don't know how to improve. Right. So having that data point, this is.

Huge. Yeah. You know, Yeah. I mean, we have so many devices that does that right now. It can be very easy.

Diet, Exercise, and Lifestyle Changes

In the when I first started doing this, I just had my verts get a step counter and I said just write down how many steps you take every day. Yeah, few dollars. Yes.

And that was very easy for them. It's really interesting. Now, all these things that you talked about, clearly good for people with autoimmune conditions, but also is extremely helpful for people living with type two diabetes.

I mean, there's no conflict there, right, in terms of, oh, I have surgery and then also the exercise component. Correct. And then, you know, a third thing that we can do, again, does not cost a lot is have a gratitude practice. Mm.

Well tell us more about that. That so I see this is a lovely thing you can do before your meals with your family is to be thankful for one thing, one thing in the day and it could be, you know, today I did a short walk around the block with my dog and my daughter.

It was a beautiful day. And so that'll be my gratitude. This doesn't cost you anything. But by having that expression of gratitude that can lower inflammation, producing cytokines.

Lowers distress, and really promotes some of the happy hormones. Right. That correct your body. That's amazing there. So so we talked about nutrition and exercise.

Now, you wrote a whole book extensively about about this I believe it's called The Walls Protocol or Walls Protocol. Yeah. So I wrote that about my story of your profound disability, how reversed it.

And then I gave people, you know, step by step instructions on what they could do to grow their motivation to make the change. Some suggestions on how to take ease from their current eating to progressively more healthful eating.

Some strategies to think about movement, stress reduction, toxins, hormones, etc.. Yeah, it's really interesting. This is a this is certainly unplanned for but I'm going to throw it out there.

So so I know, for example, Professor Walter Longo has, at least in animal studies, show that by fasting, he saw changes right in the neurons of animals with with multiple sclerosis.

So what have you know. Yes. So I love fasting. I think fasting is a phenomenal strategy. Intermittent fasting, chronic fast with some 24 hour fast or a 36 hour fast, or Dr.

Longo's version, which is reduced calories for 3 to 5 days. All of these things will stimulate more nerve growth factors in my brain and more stem cells that will be released in my bloodstream, which will help go repair whatever needs repairing in my body and will help again support better myelin repair in my brain.

So I love that I, I did five days to seven days of intermittent calorie restriction for about two years. Then I went to eating every other day for another two years.

And then my primary care person said to me, Terry losing too much weight. You got it. You got to be eating a little bit more. So I'm I'm eating a little bit more these days.

You know, in my conversation with with Walter, he he did mention that while fasting is an important component, but the re feeding is as important in the process is the magic.

Right. So so it's almost like when you exercise is not simply enough to to tear apart those muscles, the strain, the muscles, but allow the muscles to heal and then fasting.

Right. Their stress to the body and that re feeding phase where you eat the right food to regrow those parts of the cells that that kind of cleaned up during this prolonged fasting is so important.

I think a lot of people miss the point, right?

Fasting, Refeeding, and Research

Just fast as long as possible. That's really not the issue is the repeated cycles of fasting and then we feeding. I think that, you know, the way to think about that, it's the yin and yang of life.

That's right. No, it's the growth and the repair phase. And so, you know, and I I'm a former athlete, sometimes highly competitive. So it's not surprising that perhaps I get a little too gung ho on the fasting part and not paying quite enough attention on the feed part.

Well, this is where I think, you know, modern day science is really adding followers right to the whole discussions around nutrition, because for a long time we talked about suit as being key, but the times when you don't eat food, that is the fasting phase can be as every bit powerful as the nutrition themselves, but they have to be done in a coordinated way, right?

Much like I said, the fasting is a stress to the body and the body has a response, but also the re feeding phase where now you're giving body, you're replenishing the body with nutrients.

That's going to build up the tissue and to really regenerate and rejuvenate these tissues and cells are critically, critically important. It is wonderful.

Yeah. Dr. Wahls So what do you think the field is going right? This whole autoimmune conditions, including this auto immune type 2, what is the whole feel like you've been doing many talks and you continue.

Yeah, well, you know, I'm excited to see that there's more and more acceptance that nutrition matters. You know, when I first started studying this in 2010, this was a radical idea.

And, you know, when I was condemned and banned and, you know, you would you want just take the empties now, there's much more. Embracing that diet does matter.

That influences the microbiome, the immune system that exercise matters, that stress reduction matters, that loneliness matters. And there's more appetite from funding agencies to fund wellness studies, diet and lifestyle studies.

And now instead of just writing grants for a diet, now we're writing grants for diet plus exercise, because I think that's really we need to do everything together if we're going to create health, because we are, you know, we are just mice, which is super interesting for mechanistic studies.

But if you really want to know, does that work for type 2 diabetes?

Future of Lifestyle Medicine and Closing Advice

Does it work for multiple sclerosis? You have to study in people. And so there's a lot more interest in doing lifestyle medicine in people. But that's that's so well said, Dr. Wahls.

If people want to find out more about what you're doing to read more about the Wahls Protocol, where can they find it? Well, the best thing to do is to come to our Instagram.

Dr. Terry Wahls D R T E R R Y W A H L S. and go to my website, terrywahls.com and go pick up the Wahls Protocol wherever books are sold. That's fantastic.

And maybe one on one moment of encouragement for for those of our listeners who are struggling and they may find out that they have autoimmune conditions or even not so well, What encouragement can you offer.

If I can come back from profound disability to the point where I can hike, I can bike, I can now jog, there is hope for you. Do not despair. Just begin improving your health behaviors one step at a time.

Dr. Terry Wahls, thank you very much for spending the time with us today. Thank you.