Opening and Hashimoto's Hope

What I would like to say is that if you have been told that Hashimoto's is not reversible, you cannot do anything to lower the antibodies, that is not correct.

Through our protocols or through a lot of other functional medicine protocols too, you can lower the antibodies, you can get your life back. So do not lose hope.

You just have to work on the right things. You have to address the underlying root causes. That's where the magic happens. You will see so much better in how you're feeling.

Your blood work will get better and you will get the life back that you deserve. So do not lose hope. Take the right step and you are going to get better.

Welcome to the Functional Edge. I'm Dr. Julia Ward, and this is where science meets real world strategies for living healthier, sharper, and stronger.

From uncovering hidden environmental toxins to unlocking peak performance and mental clarity, we cover it all. Ready to take control of your health and thrive?

Let's dive in. Hello, and welcome to the Functional Edge podcast. I'm your host, Dr. Julia Ward, medical director and founder of Balanced Body Functional Medicine.

Today, we're honored to welcome Dr. Anshul Gupta to our show. In this episode, Dr. Gupta will be sharing insights on thyroid health, autoimmune conditions, and the functional medicine approach to uncovering root causes, particularly in complex conditions like Hashimoto's thyroiditis.

A board-certified medicine physician with advanced training in functional and integrative medicine, Dr. Gupta previously worked at the Cleveland Clinic's Department of Functional Medicine and now focuses on helping patients address chronic illness through personalized lifestyle, nutrition, and targeted interventions.

So stay tuned for an engaging conversation that promises to empower and inspire your path to wellness. So welcome, Dr. Gupta, and thank you for being here.

Absolutely. It's really a pleasure being over here. Thank you so much for the work that you're doing. You know, your podcast is amazing. So much great information that you're sharing with people.

So thank you for having me over here. Awesome. Thank you. So for our listeners who have heard the term but don't fully understand it, how do you define Hashimoto's in a way that goes beyond an autoimmune thyroid condition?

Podcast Introduction and Guest Background

And what are the most common early symptoms that you see that often get missed? Absolutely. So basically like you know a lot of people have been diagnosed with hypothyroidism or they know that they have low thyroid and for that they are typically prescribed the medicine which is the levothyroxine.

Very few people actually know the reason behind their hypothyroidism which is this Hashimoto's disease because they are not getting the complete blood work for it.

Hashimoto's disease is the condition where people bodies are producing antibodies which is doing a slow

destruction of their thyroid gland. Now people think that you know these antibodies are only affecting the thyroid gland but in reality these antibodies in this autoimmune process not only damages the thyroid gland but damages other systems of the body specifically mitochondria, their gut, their brain and as well as the other hormones and that is typically the reason that people will have whole different kinds of symptoms with Hashimoto's disease.

Some of the few common symptoms that people present with is that they feel tired a lot of time. They have fatigue. Doesn't matter what they do. They feel tired.

They have to take a nap. They're having weight issues where it doesn't matter what they do. They're unable to lose weight. Then they have brain fog issues.

They feel the brain is not as sharp as before. They will have mood changes, depression, anxiety, not able to tolerate stress as compared to before. and then plus gut related symptoms whether it is IBS or constipation, bloating, gas or even feeling having cold intolerance.

They will feel cold all the time. So these are just some common symptoms that people present with Hashimoto's or low thyroid condition but in reality it is because of that underlying autoimmunity, underlying inflammation which is damaging the mitochondria and the other parts of the body that these symptoms happen in these Hashimoto's people.

So why do you think so many patients are told that their labs are quote normal, yet they still feel exhausted, inflamed and unwell? And what's being overlooked in conventional care?

So again, coming back to the issue with hypothyroidism, most people are told that they have hypothyroidism, the only test they get is TSH. Now TSH doesn't give us the complete picture of how the thyroid is functioning.

Plus it also doesn't tell us whether a person has Hashimoto's disease. Now interestingly going to the pathophysiology of how the thyroid hormone is being produced in our body, TSH is actually not an actual thyroid hormone and most people don't realize it.

TSH is a signaling hormone, your pituitary gland which is your master endocrine gland.

What Hashimoto's Is and Common Symptoms

secretes TSH which is the thyroid stimulating hormone that goes to your thyroid gland and sends the signal to your thyroid gland to produce actual thyroid hormone which is the T4 hormone.

Now this T4 hormone is what we call as inactive thyroid hormone and goes into your body and needs to be converted to T3 which your cells can utilize. Now if you're only testing your TSH, you're not testing your T3 and T4, you do not know quote-unquote what is going on with your thyroid.

So that's one reason that people are told that they have normal thyroid labs because they're only checking their TSH. The second reason is not checking the antibodies.

Research shows that people can have Hashimoto's disease 4-5 years antibodies even before they finally get diagnosed with hypothyroidism or when their TSH gets abnormal.

Well, all of these 4-5 years they have symptoms because the disease process is ongoing and damaging the body. So very important to check the antibodies and two antibodies to check for Hashimoto's disease are TPO, which is a thyroid peroxidase antibody and the other one is called thyroglobulin antibodies.

Now interestingly, these antibody tests can be done in each and every lab across the country. So you don't need to go to advanced lab testing, you don't need any specific orders.

Your regular doctor can even put those orders. And if your antibody levels are higher than the reference range of

that particular lab, that is diagnostic of Hashimoto's disease.

You don't need an ultrasound, you don't need a biopsy, you don't need advanced testing. The presence of antibody itself tells you that you have Hashimoto's disease.

That's very important reason that a lot of lab work are normal because people are not getting complete testing. The second problem that is happening is that the only treatment which is being provided to these Hashimoto's people is replacement of thyroid hormone which is the T4 hormone called levoteroxine medicine.

Now the problem in Hashimoto's disease is two-pronged. One is that they do have deficiency of thyroid hormone but the primary problem is this underlying inflammation and autoimmunity.

And most people do not know that this levothyroxine medicine doesn't do anything to address the underlying autoimmunity or inflammation. So they are not even tackling the primary problem which is the reason of these symptoms and that is the reason that people continue to have symptoms and research suggests more than 60% of people who have Hashimoto's disease, who are taking medications and their blood work is normal still continue to have symptoms because again the underlying problem is not being addressed.

You've dedicated a large part of your work to Hashimoto's. What drew you specifically to this condition and how did your personal journey shape the way you approach these patients today?

Absolutely. So in our functional medicine world, you know, like this is always a joke that any MD who enters a functional medicine realm doesn't do it unless him or her have gone through a personal journey.

So my journey was that, you know, I have a family dog, you know, I was practicing in a private practice. And suddenly couple of years into my practice, I started having a lot of symptoms.

I was feeling tired to the point that I had to take a nap during the afternoon just to function. After my clinic day was done, you know, I will feel brain foggy that I was not able to concentrate on things.

I was gaining a lot of weight even though I did not change anything in my diet or workouts. And then plus, you know, I was starting having this horrible stomach pain.

Had no idea why I was having this stomach pain. Initially, I thought maybe it is acid reflux. I started taking an over-the-counter acid reflux medications.

They were not doing anything. Then I thought maybe I need to go stronger. So I started some, you know, omeprazole and PPI medications. Even they were not doing anything.

And the pain was so severe that I will double over that I had to sometimes think about even going to the emergency room. But then they realized that what are they going to do?

They might just give me some pain medications and stuff because I did not had any other symptoms. Then I thought, well, maybe I'm not a smart doctor. Maybe I need to go to these specialists.

So I went to my specialist friends who did endoscopies, ultrasounds, blood work, bunch of testing. Everything came back normal. I had there no idea what was going on with me and they added more medications to my regimen.

I was only 32 years of age taking five different medications just for my stomach.

Why Conventional Labs Miss the Full Picture

And that hit me hard that, you know, do I have to take these medications for my lifelong? Is there a way out of it? That's where somebody said, well, people like you go to functional medicine, so why don't you try it?

So I got trained into functional medicine, started applying the protocols in my own life, and then completely transformed my life. You know, I changed my diet, took some basic supplements, and within one month, the stomach pain was gone.

And then within six months, you know, like, you know, I was off all medications and I lost more than 40 pounds during that time. And my energy levels were so great and I was in best physical shape that I even participated in a 5k rugged maniac and I was never an athletic person.

So for me to do that was really a big thing. And that hit me hard. I was like, wow, basic changes in my lifestyle with some supplements literally change my life.

So this is something that I need to do for other people too. So opportunity came to work at the Cleveland Clinic, functional medicine department, they wanted to do research.

And over there I realized that I was seeing all of these patients and they had all similar things. They were all middle-aged females and they had similar symptoms like mine.

They were all brain foggy, they had weight issues and then they were tired or fatigued and they were taking medications. And the primary factor was that they all were diagnosed with Hashimoto's disease or thyroid disorders.

And they were all told, you're on right medication, nothing can be done. So I immediately thought, okay, I need to help these females because they have similar conditions as mine.

So I started researching Hashimoto's disease made by three step process and implemented it. And we saw amazing results. not only their quality of life improved but we were first time able to lower the thyroid antibodies which they had been told by their endocrine specialist that you cannot lower your antibodies doesn't matter what you do and we were able to lower them sometimes even bring them back to normal.

That's where I started doing this Hashimoto's thing now. That's awesome. And how do hormones, stress physiology, and immune activation intersect in women with Hashimoto's, especially during the perimenopause and menopause periods?

So Hashimoto's conditions is basically triggered by a whole bunch of things. And hormonal complexity is a very important phenomenon over here. And that's one of the reasons that females are a little bit more prone to Hashimoto's disease as compared to males because of the complexity of their hormones.

Because again, females go through these changes in their hormones, specifically in the perimenopausal areas. At the time of perimenopausal time, the female hormones are changing rapidly.

Their estrogen is going down, their progesterone is also off. That's the time which creates stress in female's body because any hormonal shift is a stress for the body and body doesn't like it and that can be triggering for Hashimoto's disease or autoimmunity.

Similar things happen with physiological stress also. We see very common that when people have gone through stressful work environment or stressful relationships or even post pregnancy because there is a big hormonal shift which is happening, the hormones go out of sync and that is the reason that triggers this whole autoimmune cascade of things and that leads to Hashimoto's disease.

So that's where the whole hormonal system of our body is like a big symphony and each and every hormone is playing a role but is connected with each other and when one hormone is not in sync then it creates the whole dysfunction of the whole hormone things and that's the reason that whether it is your adrenal which is the cortisol whether it is your female hormones or whether it is your thyroid hormone one goes out of sync The whole organ symphony of your hormones go out of sync and that leads to Hashimoto's or other hormonal problems.

You talk extensively about the Mito thyroid connection. Can you explain what that means in practical terms and why supporting mitochondria is essential for thyroid healing?

Absolutely. So when I was researching Hashimoto's disease and I looked at all the symptoms you know and it was not making sense that if you are replacing the thyroid hormone and if all the symptoms are because of just deficiency of thyroid hormone then replacing the thyroid hormone will fix it.

But again research suggests that you know it doesn't. So there has to be something which is going on. And what I looked into research was that there was a research study done.

What they did was that they took thyroid gland of Hashimoto's patients and they looked it under the microscope and what they realized was that that thyroid gland was completely filled with dysfunctional mitochondria.

Those have very high amount of mitochondria, but they were not all working. And that was actually the primary reason that I realized which is happening in Hashimoto's disease that this destruction of mitochondria is actually the reason of the symptoms.

And we all know that thyroid and mitochondria are interconnected. The thyroid hormone controls the mitochondrial function. What I realized was that it is actually the opposite that mitochondria is responsible for producing the thyroid hormone in the thyroid gland.

And it was because of the dysfunction of the mitochondria that we have symptoms because if you see all of the thyroid symptoms are actually mitochondrial symptoms.

Personal Health Journey and Functional Medicine Turning Point

Mitochondria is a part of the cell. So fatigue obviously happens because of mitochondrial dysfunction. Highest concentration of mitochondria is in your brain.

So that's the reason brain fog is a major symptom. Mitochondria produces heat in your body and that's the reason cold intolerance is a major symptom. Mitochondria also controls the peristalsis movement in your gut and that's the reason constipation or bloating is again a major issue.

So that's where I realized okay there is a connection between your mitochondria and your thyroid and just replacing thyroid hormone is not going to do it so you have to support and work on regeneration of mitochondria then only you can improve and support Hashimoto's disease.

Now that makes total sense. Yeah. So what breaks down first in Hashimoto's patients? Is it the thyroid itself or the mitochondria that power every cell?

And how does that change how we should treat the disease? So as far as I'm concerned, I feel it's the mitochondria which gets damaged first and that's the reason that further leads to the damage in the thyroid gland and your thyroid gland is unable to produce a thyroid hormone because your mitochondria is not functioning.

Do have a research study like you know whether it is a chicken or egg situation what happens first. So I don't have it, but that's my personal belief that is going on.

But I believe both are being damaged. And that's the reason we have to work on both repair of mitochondria and thyroid that needs to be done. But definitely first, we need to stop the destruction.

That whole autoimmune cascade, whole inflammation, which is happening in the body, which is leading to destruction. We need to work on that first. And then we have to work on rejuvenating of the mitochondria.

And then obviously we have to work on rejuvenation of the thyroid gland. And this is where the functional medicine model of care is very different because the conventional model of care is just replacing the thyroid hormone.

That thyroid hormone replacement is not either stopping the damage, it is not replacing your mitochondria, it is not working on rejuvenation of thyroid gland itself.

So that's where the protocol or the process of functional medicine or our three-step process heavily focuses on regeneration and stopping the damage to the thyroid and mitochondria.

And how does chronic inflammation and immune activation divert energy away from metabolism and towards defense and how does that show up clinically? So our body has only limited amount of resources to function and we have so many different functions that are going on in our body.

One is definitely energy production, second one is obviously reproduction and then third one is obviously making defense as a priority where we want to defend our body with everyday organisms we are being exposed to, whether it is infections, you know, parasites, bacteria, viruses, which is all around us, right?

When body is broken down, when there is too much inflammation in the body, then body has to divert resources to tackle this inflammation. And then it has to prioritize on what I need to shut down or take away the resources so I can lower this inflammation so I can function better.

It's kind of a survival mechanism. And when that is doing it, the executive functions of our body gets affected the first. So the executive function is obviously reproduction.

So we see a very high chances of infertility in females or males which is rising up because of this whole autoimmune cascade of Hashimoto's disease because the first thing which gets shut down is reproduction.

The second thing that gets affected is the energy production. Okay, well let me produce less amount of energy so at least I am functioning but I'm not functioning at the optimal level.

And then obviously that we are conserving this whole metabolism of our body so that we don't starve ourselves to death. And that's the reason the metabolism also gets slowed down in Hashimoto's patients.

That's the reason they do not lose weight even they want to. So that's what is happening, the diversion of the resources. Got it. Yeah. And I'm curious if you have any experience since we're talking about mitochondria and inflammation with hyperbaric oxygen chambers and Hashimoto's, if that has been shown to help out clinically.

So we don't have a head-to-head study where we saw that, you know, hyperbaric oxygen treatment in Hashimoto's specifically will rejuvenate the thyroid gland.

But we see that in Hashimoto's patients, again, brain fog is a very major issue that we see. and hyperbaric oxygen definitely improves the brain functioning.

So a lot of people with brain fog you know see the mental clarity is coming back they will feel more energy generally in their body and plus they will see that there is a little bit of lower inflammation as compared to before.

So if a person has brain fog issues where the brain is not functioning they feel that they are forgetting or not able to concentrate then hyperbaric oxygen definitely we see a great improvement in those Hashimoto's patients.

So, in your experience, Hashimoto's doesn't just happen. What are the most common environmental or lifestyle triggers that push someone over the edge?

Through my research, what I identified was that there were five major root causes or triggers that kind of comes together to trigger Hashimoto's disease.

And these five main root causes, one of them is food sensitivity. We are seeing more and more people are developing sensitivity to either gluten, dairy, soy and other kinds of food.

Gluten being number one, we have research studies which do support that people who are eliminated gluten see an improvement in Hashimoto's disease. So food sensitivity being a number one cause that because our food industry or the food habits are not the best and definitely that affects, you know, how we make antibodies and also leads to leaky gut problems.

Hormones, Stress, and Autoimmune Triggers

So that's first root cause. The second root cause is definitely toxins. Each and every day in our body, we pour more and more toxins. There are so many synthetic chemicals our environment has today and all of those things get concentrated in our body.

Whether it is heavy metals like lead and mercury or arsenic, which we have known for a very long time, they have negative effects on our body. or whether it is the environmental toxins like glycosates or whether it is BPAs in our plastics or a whole bunch of other chemicals or whether it is the mold toxins which we know now hijack our thyroid gland.

All of these things actually go directly to our thyroid gland. So our thyroid gland basically acts as a sponge and even small amount of toxins the body get exposed to, it directly goes through the thyroid gland and then slowly and slowly a part of it gets deposited over there.

and then finally one day it leads to the toxic level and that leads to the immune barrier breakdown and that again triggers Hashimoto's disease. So toxins definitely are a major reason.

Now here most people think, well, I don't think I never got exposed to any major toxins. Well, it is the accumulation or total exposure of toxins over the course of years, which leads to the toxin buildup in your system.

So that's a major issue that we see in Hashimoto's patients. The third one as you're talking about is stress, whether it is your emotional stress, physical stress or hormone related stress that we just spoke about perimenopause or even like you know after pregnancies or even any other stress your body get exposed to that again triggers Hashimoto's disease.

Then the fourth one is nutritional deficiencies. Your thyroid gland need specific vitamins and minerals, specifically zinc, selenium, magnesium, B vitamins, D vitamins.

All of these things play a very significant role in keeping your thyroid gland in good shape. Deficiency of these vitamins and minerals lead to again triggering of Hashimoto's disease.

And lot of people are low in these vitamins and minerals because even our food chain currently is low in these vitamins and minerals. So even though we might be eating the best of the diet, we might still be low on them.

Do you also recommend iodine? So iodine is a double-edged sword. So the research says that too much of iodine causes Hashimoto's and too little iodine also causes Hashimoto's disease.

So that's the reason we have to make this recommendation on an individual level. So certain people who are eating a lot of seafood or seaweed or sea vegetables, we recommend not to have iodine supplements.

But on the other hand, if person is not eating any seafood, sea vegetable or fish or any other source of iodine, then yes, iodine definitely is a good supplement to add on.

So it basically depends on individual approach for that. And the last root cause over here is infections. You know, like we know about like parasites in the gut, which can lead to Hashimoto's disease.

We know Epstein-Barr virus reactivation. Several research studies do show that causes Hashimoto's disease. And now we are dealing with long COVID as also a trigger for a lot of people having Hashimoto's disease.

So these chronic infections in our system also leads to triggering of Hashimoto's.

Mitochondria and Thyroid Function

And what people should know is that it's never just one root cause. It's a combination of two to three root causes coming together, which ultimately leads to Hashimoto's disease.

So just cleaning up your diet or maybe just improving your lifestyle alone sometimes doesn't give the people the benefit. They have to look at all the root causes, work on all of them, then only they are going to see improvement.

Let's talk about heavy metals and mold for a minute. Heavy metals are a topic that can feel overwhelming for patients. What are the most common sources of exposure you see and how are these metals, how do they interfere with the thyroid signaling and the immune balance?

So the most common heavy metals that has shown you know research studies to interfere with thyroid issues one is lead, the second one is mercury and third one is arsenic.

So these three definitely we have research studies which do so that you know they can affect the thyroid negatively for a long time and there are other heavy metals we do not have direct research studies like in aluminium and other things but they can also contribute.

The mechanism of system is kind of you know very similar in terms of what we call is either molecular mimicry or either kind of you know breaking down the immune barrier in the cell.

So what happens is that these heavy metals you know interfere with thyroid hormone production that's the first thing which is happening. because they get absorbed into the thyroid gland so either they can interfere with absorption of the iodine or you know a conversion of iodine into the thyroid hormone production.

So that's one way they interfere with. The second thing is that these heavy metals once they get deposited in the thyroid gland What happens is that your body cells think they are external sources, so they want to produce antibodies against them.

And lot of these heavy metals, specifically mercury and lead, has very similar molecular structure as compared to your thyroid hormone. And that's the reason when your body is producing antibodies, they actually damage your thyroid gland instead of damaging or removing these heavy metals.

So that is called molecular mimicry. That again is a second reason. The third reason is breaking the immune barrier. When these heavy metals keeps on getting deposited into our cells.

Then our immune system kind of again feels overwhelmed in taking care of these heavy metals to keep them at bay. And then finally that level reaches where our immune system breaks down.

And when our immune system breaks down, we have two parts to our immune system. One is what we call as a damaging to our body immune system and the other one is protective immune system.

When our immune barrier is broken down, the system which is damaging our body gets activated and it never gets shut down and that's where these antibodies are made and this activation of this immune system breaks down our thyroid gland and leads to Hashimoto's disease.

So these are the different mechanisms why these heavy metals can actually cause issues with our body. Now what is the exposure sources? So mercury typically comes from fish.

So fish which is heavily polluted with mercury, that's one source. The second source is obviously silver fillings. So people who have had silver fillings as a child, those silver fillings in their mouth have mercury in them and over the course of time it breaks down and can release mercury in the system.

Lead typically can come from lead paints, but obviously we do not have lead paints these days. But what we are seeing is that a lot of restored houses, they never got stripped completely from the lead paints, but people kept on painting on top of them, quote after quote.

So again, they can release lead. The second source is water.

Inflammation, Energy Drain, and Metabolism

Lot of the municipal or community waters or even well water is polluted from lead. So that is the second source of lead that we see people happening. Arsenic, a typical source of arsenic is rice.

So if you're eating rice, which is coming from Asian countries like India, Pakistan, and other places, their soil is very high in arsenic. So that is a major source of arsenic in our system.

All right. I would just add that those of us born before 1984 used to breathe in the leaded gasoline that was, you know, the thing before unleaded gas.

So, you know, and it doesn't just circulate in our system, it just goes in and settles in our bones and then comes out at later dates. So yeah, very interesting.

Mold exposure is increasingly recognized in chronic illness. How do mold toxins specifically worsen Hashimoto's? And why do some patients seem more uniquely sensitive than others?

So mold is actually an interesting phenomenon. We all kind of knew about mold toxins causing diseases like a long time ago. The major research actually was done in livestock because the livestock was fed this grain which was infested with mold and we came to know that they had a whole bunch of issues, autoimmune and thyroid and what not.

but we never thought that you know the same mold can affect the human body until like you know 10-15 years ago some of the functional medicine dogs thought well maybe this mold is the reason that we are having so many autoimmune diseases and then yes the research do suggest that these mold toxins when you know our body get exposed to them they do interfere with our hormone production as well as also create something called SERS which is CIRS which is chronic inflammatory response syndrome.

Basically again when these mole toxins are being produced in our body, they hijack our immune system and then again same thing the TH1 and the TH2 response, the two responses that I was talking about in our immunity where one is protective and one is damaging to our body.

The mold actually again activates the TH response which damages our body and leads to inflammation producing chemicals. And these inflammation cytokines and chemicals leads to what we call as SIRS.

And these SIRS starts damaging different parts of our body. The main ones are the thyroid gland.

Hyperbaric Oxygen for Brain Fog

So it interferes with the thyroid hormone production and damages the thyroid gland cells so that the cells are not able to produce thyroid hormone and ultimately leads to hypothyroidism and Hashimoto's disease.

And so when mold or metals are part of the picture, and doing an aggressive detox can actually backfire if the nervous system and mitochondria aren't supported first, is that right?

That is correct. Yes. A lot of people, you know, like who listen to me or somebody else talking about detox. The first thing they go online is that look for a detox bundle, start using it.

And that actually harms their body. You know, actually a lot of our clients come to see us. Dr. Gupta, you know, like

I think I have made things worse for me.

I said, what happened? You know, like I heard somebody talking about mold and then, you know, I said, yes, you know, like, you know, I see mold in my basement.

So let me start detox and they do the detox and they feel worse. They have brain fog issues, their energy goes down. The reason being detox is a process and then you have to do it in a safe and a proper manner.

There are three different phases of detox. Most people are just working on phase one of the detox that actually cause recirculation of these toxins and actually damages your body more.

So detox is not the first thing that you need. You actually need to work on your gut, your mitochondria, your inflammation, your nutrient deficiencies.

And once all those channels are optimized, then you start the detoxification. So absolutely very important point that don't start your detox tomorrow.

Root Causes: Food, Toxins, Stress, Deficiencies, Infections

Even if you have high amount of toxins, there is a process involved into it. You need to work on all the different phases of detoxification. You've incorporated peptides into your work with Hashimoto's patients.

So which peptides are most promising and what roles do they play? Like immune modulation, mitochondrial repair, or gut integrity? Absolutely. So peptides, what are peptides?

A lot of people have heard of them, but they don't know exactly. So peptides are a small collection of amino acids. They are similar to proteins. You know how proteins are also a collection of amino acids but proteins are bigger numbers of amino acids.

While peptides are very short chain amino acids coming together. They are naturally made by our body. But through research we have known more and more peptides which have therapeutic potential.

The most common or the oldest peptide we all know about is insulin. Insulin is a peptide our body makes and we have been using it as a medicine for a long time.

Similarly, we have identified at least 100 different peptides which have different roles to play in our body and some of those peptides have great potential.

So couple of the peptides that we have seen like you know improvement in our protocols, one of them is gut related peptides. One of them is BPC 157 which is typically produced by our gut which again reduces inflammation in the gut.

It is really good for gut healing. So we use that. Along with that is KPV. That is another gut healing peptide, specifically people who have a lot of inflammation in the gut or have issues with SIBO or Candida issues in the gut.

KPV can be very good by improving the gut immunity and healing the gut. So that's the first range of peptides that we use. The second region of peptides are immunomodulator peptides.

You know, like two peptides over here is thymosin alpha 1 and thymosin beta 4. Both of these ones are basically working on retraining our immune system so that our immune system doesn't hurt our body.

In fact, it protects our body again. So these are the two peptides that we use which can reduce inflammation. Again, they are good for healing. And some people, you know, like with Hashimoto's are very sensitive.

Like any supplement you give them, any meditation they get, they react to it. So these immunomodulator peptides

are really good because they lower down kind of this sensitivity in their body.

So at least we can start them on a proper protocol that way. And then obviously comes the mitochondrial peptide, which is the mortisee is a great peptide, which supports the mitochondrial health.

Because again, as you're talking about, a lot of people will have fatigue issues, brain fog issues, low energy. And this mortisee can help them support their mitochondrial health and improving it.

The other peptides which we don't use very often but people with Hashimoto's disease who have issues with either sleep problems or have very much anxious or they have stress issues.

Then C-max and C-lang are two categories of peptides which can be very very useful improving their brain activity, reducing the stress, reducing like you know mood changes and things and help support their brain health.

Yeah, but peptides are kind of fitting into a larger healing strategy. They're never just standalone treatments. Is that correct? That is correct. Yes.

So, you know, like we can obviously, you know, go on and on about the peptides and things, but, you know, there is a major role of a peptide and then obviously there are several minor roles.

So the peptides I spoke about, you know, their major roles are kind of defined over there, but they have so many other kind of side roles which they improve on.

So introducing one peptide works on so many different pathways in our body and then help our body in so many different ways. So absolutely that one peptide works and helps our body in so many underlying mechanisms that is very difficult to define like what exactly they are doing and also what all benefits you know they are going to do to our body.

Got it. So for someone listening who has been told their Hashimoto's is progressive and irreversible, what do you want them to understand about the body's capacity to heal?

What I would like to say is that if you have been told that Hashimoto's is not reversible, you cannot do anything to lower the antibodies. That is not correct.

Through our protocols, through a lot of other functional medicine protocols too, you can lower the antibodies, you can get your life back. So do not lose hope.

You just have to work on the right things. You have to address the underlying root causes. That's where the magic happens. You will see so much better in how you're feeling.

Your blood work will get better and you will get the life back that you deserve. So do not lose hope. Take the right step and you are going to get better.

Awesome. And what are three to five things patients can start doing tomorrow to begin reversing Hashimoto's, like before lab supplements or advanced therapies?

I'm a big proponent of lifestyle changes. So that is the foundation. Anybody, everybody who's listening has Archimotor's or thyroid disease, they need to start working on their lifestyle.

What that means is that start working on your diet.

Heavy Metals and Mold Exposure

You know, clean up your diet today itself. Give up the bad food. Give up the inflammatory food. Stop eating all that junk that we have been sold for decades now.

So stop eating, you know, like the processed food, stop going to fried foods, processed food, stop eating sugary foods. If you are able to give up gluten and dairy, that is great.

Steadily start doing that and start eating healthy foods. What that means is that include lots and lots of good non-starchy colorful vegetables. Each and every vegetable that you are eating has a color and each and every color in that vegetable is an antioxidant, vitamin and mineral that you're putting in your body which is helping in lowering the antibodies as well as supporting your thyroid gland.

So eat your veggies. Your grandma was absolutely correct when she said, eat your veggies. So that's what you need to start doing. Eat your rainbow of veggies.

Exactly. The second thing is good quality proteins. We need those amino acids, L-tyrosine, L-glutamine, all of those great amino acids, we need that, so good quality protein.

So if you can eat chicken, fish, even meat, if you get grass-fed organic meats, great. If you are vegan or vegetarian, eat your lentils, legumes, nuts and seeds, but get your proteins, very important.

The third thing is good quality fats. Again, we have been fat shamed for a long time. All fats are bad. Not correct. We need good fats. Your thyroid needs good fats, your brain needs good fats.

So include those great fats, which can be coming from your fatty fishes, those omega-3s, or it can be coming from nuts and seeds like almonds, walnuts, olive oil, avocado oils, even avocados.

All of those are good fats that you need to include. So that's the basic of these diets. Clean up your diet, include healing foods which will be good for your thyroid gland.

The second one is stress management strategies. Yes, you might not feel stressed out. You can handle stress. You are a strong person. Absolutely. But we all need a break.

That means that include 10 to 15 minutes of stress reduction exercises, which can be deep breathing, which can be meditation, which can be journaling, gratitude journaling, any of those things.

But that 10 to 15 minutes is your time. You need to work and give a break to your adrenal glands. You are going to feel so much better from it. And the third thing is body movement.

Now this is where I call it body movement and not exercising. Because unfortunately for Hashimoto's disease, high intensity exercising can backfire. So start with gentle body movement.

Again, 15-20 minutes. Mix cardio and strengthening. That is the best exercising regimen for Hashimoto's. If that is even too much for you, start going for a walk.

Go for gentle yoga, Pilates, anything that you can do. Move your body for 10-15-20 minutes a day. That again will lower inflammation and support your thyroid gland.

So these are the three basic things that each and every person can start doing tomorrow itself which is going to give them long lasting benefits in not only improving their Hashimoto's but also rebalancing all the other hormones and their body in general.

Absolutely. That's great advice. I love that. If you could change one thing about Hashimoto's and how it's diagnosed and treated in mainstream medicine, what would that be and why?

I just want everybody to get the complete thyroid blood work. I just wish that each and every person gets the Hashimoto's antibody testing done.

Detox Caution and Peptide Support

because that will help us to identify Hashimoto's at a very very early stages because right now it is taking a long time for the diagnosis and by the time the damage has already been done.

So early diagnosis is the key Hashimoto's antibodies as well as TSH, T3, T4 you know complete thyroid panel will give us a complete picture you know about what is happening in a person's body with Hashimoto's disease.

And second of all, also realizing sometimes levothyroxine T4 medicine is not alone and that's where lifestyle changes can be useful and adding sometimes for some people T3 hormone medication is not a bad idea because there are some subset of people who do not convert that T4 to T3 and they need that T3 hormone, you know, on top of the T4 hormone and that will be very, very useful for them.

So first of all, complete testing and then also realizing that yes, there are some people who might need T3 on top of the T4. I think if conventional medicine can do that itself, they'll be doing a big service for a lot of people.

Great. So finally, after working with thousands of patients, what gives you the most hope about the future of thyroid and autoimmune care? I feel that, you know, now we're realizing that, you know, thyroid and autoimmunity is complex.

You know, we all were told that, well, thyroid is easy. They get diagnosed with it, you give them levoteroxine, you send them home, you check the TSH, if it is fine, your job is done.

Whether the patient has symptoms or not, whether they're getting better or not, that doesn't matter. That is what you need to focus on. But now people are realizing that, well, why are so many of my patients not getting better?

So they're realizing that autoimmunity is complex, the immune failure, there is a reason behind it. Suddenly we do not have a generation of people, you know, which are getting diagnosed with autoimmunity while the last generation, you know, they were literally any autoimmune diseases.

So now realizing it is complex. So they're looking for more reasons why, you know, like it's automatically is happening. And then also being open about that diet can play a role.

Yes, stress management can play a role. Yes, exercising is great. And even some basic supplements like even vitamin D itself, you know, is so much good for their patients and they're checking it regularly.

So that gives me hope that at least they're being open.

Reversibility, Lifestyle Steps, and Better Testing

you know and then looking for other reasons and complex phenomenon of what is driving the whole autoimmune cascade of things and then looking for comprehensive approaches to manage the thyroid patients and then lot of centers are actually looking at diseases as not just one thing they can do but combining a team of approach where you know patients are supported from all different angles and providing them the team approach of let's say a coach or a nutritionist or other ancillary services that can provide them that valuable feedback which will so improve the disease process so that gives me hope that you know that the conventional medicine is looking for other ways of helping their patients out and hopefully that will become mainstream and more and more centers will employ it.

That's awesome. That's great. Well, thank you so much for joining us today. It's been so enlightening. Thank you, everyone, for joining me on the functional edge.

I hope today's episode gave you fresh insights and practical tools to level up your life. If you found value in what you heard, don't forget to hit the subscribe and share the podcast with someone who needs it and leave a review.

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And Dr. Gupta, how do people get in touch with you if they want to explore more about your services? So we have a couple of ways. So I share a lot of content through my YouTube channel.

The YouTube channel name is Anshul Gupta MD. And you know, like we share content which are like actionable steps for people so they can watch videos over there.

Plus my website has great blogs. Again, the website name is AnshulGuptaMD.com. We do provide virtual services so people can work with us from anywhere in the country.

And they can get more information on the website about working as well as, you know, reading more about the thyroid health. Great, great. Well, thank you so much again, and until next time, stay strong, stay healthy, and keep living on the functional edge.

Thank you for joining me on the functional edge. I hope today's episode gave you fresh insights and practical tools to level up your life. If you found value in what you heard, don't forget to hit subscribe, share the podcast with someone who needs it, and leave a review.

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