Introduction to Inflammation and Aging

All right, everyone, welcome back. We are going to dive into a topic that we promised you, and we now found a brilliant mind that can actually break it down and speak to it in the way we need. Doctor.

Michael. Carl health is here with us. So, first of all, thanks for joining us. It's such a pleasure to be here. Thank you so much. And that topic that I was referring to is inflammation.

And we've hear this term being thrown around more recently than before because we now understand better than ever before what's going on in the body. And first of all, it's awesome that you're here to speak on the topic.

I've, I've been looking at some of the work you've been doing and how relevant it is to this topic, and I think this is going to be an awesome conversation for everybody.

But first of all, for those of us that aren't familiar, what are we even talking about? What does it mean? So I mean, obviously most of us, we want to stay young forever and we want to have energy.

We want to not be in pain. We want to have mental acuity. So we try to figure out, you know, what? What can we do to to achieve that. And, then we have to look at what are some of the kind of aging theories that are out there.

And we are then seeing that inflammation, kind of a chronic low grade inflammation. It's actually one of the biggest drivers that causes us to age. So to to look then at what some of these factors are that's driving this inflammation becomes key.

You know, then you hear yeah, different. You know, weird name some words like senescent cells and right and or senescence and all that. And we'll talk about that a little bit later on.

But it's understanding that kind of, the importance of addressing some of that chronic low grade inflammation, that is different than the acute inflammation that we have when we're dealing with, like, you know, we get an infection or, you know, get a trauma, you know, and the body develops inflammation to heal that area.

So, so that and that's what's so exciting to to be able to kind of look at that as some of, and one of the driving factors. Yeah. And that's so important because in general, I mean, unless you're doing the type of work that you've been doing, people think about inflammation in the acute context.

We all agree that it drives disease, especially chronic diseases. But people think about the last stage, which is what they feel and the pain, and now realize there's a slow trickle that's been going on for years and years and years, and you can maybe tackle it a lot earlier. So one thing is that people in general, like I said earlier, tie it to disease, but you're saying that this is a central hub of aging in general.

So how do you separate the two? Like there's aging and there's disease. Why do you separate that and speak about that on its own silo. So so they're actually looking at you know, so so we have some things called metabolic inflammation as well meta meta inflammation.

And you're we're thinking of these diseases like cardiovascular disease, you know, a gain of adipose tissue. You know, we're getting fatter. Our heart's getting worse.

You know, we're getting, insulin resistant and all these things, and they're actually seeing that those kind of patterns are directly related to aging, you know, that kind of chronic inflammatory.

So if you see somebody dealing with these, age related diseases and that's actually the same kind of process that

we see in inflammatory aging.

Inflammation as a Driver of Disease and Brain Aging

And, so the key is, that, you know, as we get older, we think, well, you know, I am older, so I'm supposed to hurt, you know, I'm supposed to have lower energy.

I'm supposed to not be able to function, you know, or think as clearly as I used to. And that is not true. You know, all these are signs of disease, you know?

So aging is actually something that is is like a disease that is, that is preventable. And if you look at what some of the underlying factors are that's driving this process, you can then take, very appropriate steps to reduce that risk and reduce that disease that, you know, that I would call, you know, inflammation, aging or aging, you know, due to chronic low grade inflammation.

So let's take one area, say the brain, because people that if you ask anybody about aging, the number one thing they fear is typically Alzheimer's and dementia.

Like I just don't want to go down that road. Right. As a typical fear. So when you talk about it in terms of the cognitive, are these things reversible, like when you've you've aged your brain because of inflammation, have you caused damage or it more like you've put yourself down the wrong path.

Let's make an adjustment. So you have them, kind of inflammatory patterns that take place. And when you trigger that inflammation within the brain that, will then impact your body.

So or your brain's ability to, utilize nutrients to burn energy, and especially if you have a lot of toxic build up in the brain, which frequently happens if you have poor sleeping habits and if you have poor circulation, you don't move and you don't supply it with the nutrients that you need to be able to to function, then we are naturally going to have a slower functioning brain and if you kind of look upon it like a car, you know, if you don't give your car the fuel that it needs, it's not going to drive as fast.

And so is it, because the car is is having an issue? No, it's because of the fuel and how you are supporting the function of that car. So it's the same with the brain.

You know, we may feel like we are slowing down, but in reality it is that we're not supporting the brain appropriately and we're allowing things to take place that's triggering that inflammation.

So if we then reverse that process and address that inflammation and remove the toxic debris, that's an interfering with cellular function for the energy production within the brain cells.

And we also, support the repair. Then, bringing oxygen to that area, bringing that ATP. Then our brain is going then to reverse and function much better and heal better, and we're going to have much better acuity.

So in all of what you're describing, I guess it would make sense that the earlier you start, the better, right? At. Absolutely. Yeah, absolutely. And I think the trickier the tricky part about that statement is the earlier you start, the harder it is to even recognize that there is inflammation.

So how are there tools that people can people that maybe don't have a problem, that just want to get ahead of things? How would they know? So so I think it's important to understand also they when we look at these kind of what's called immuno senescence, you know, immunosuppressants.

So we will and I'm bringing in those said tricky tricky term. So let's define a senescent cells. So this this is kind of a cool new understanding of what's going on in the body.

So you have a cell that's dividing and it has a certain limit as to how many times that it can divide. And they kind of

found that as, as rate limited, you know, 50 times.

So what happens then is after it's kind of reached at 50 times and it's not being cleared off, it is then considered a senescent cell. And that senescent cell, it says secreting all these different chemicals that, you know, these kind of inflammatory chemicals.

So, in order to be able to clear these cells off, we need a strong, healthy immune system. And that, you know, now we're looking at the thymus as being one of the very important factors, because it helps a lot of the, immune system cells are matured in the thymus.

And the stem cells helps to clear out these, senescent cells that should have been cleared out. Now, they call them almost like zombie cells. You know, it's like, living, living dead cells.

They're they're just there, and they're just spewing inflammatory signals all over the place, you know, creating inflammation wherever they go in the brain and the cardiovascular and the joints, you know, wherever that is.

So the thymus becomes, really important in ordered Babel, our health immune system and thymus becomes really important to be able to clear this out.

Senescent Cells, Immune Decline, and Early Prevention

And what they've seen is that, yeah, we need a healthy thymus to, you know, as, as we get up to our 20s, you know, we are, you know, immune system functions like at a peak, you know, because we're supposed to survive to childbearing age and, and we're supposed to be able to fight the tiger so we can, you know, give food to our wife and also our children.

And then, you know, once we fulfill that purpose and we've kind of lost our purpose. So, so then the immune system functions start to go down. By the time, yeah, we had a complete blow by the, you know, time where, you know, 40, 50 and then it's just kind of bottom and we're just degenerating by what, what they're seeing nowadays is that even at 12 years old, they're seeing immune system function to be, to be decreased, what they called immune senescence, which means that our immune system is dysfunctional and it's not able to clear out these zombie cells, these, that spew out inflammatory chemicals.

And so it used to be that by, you know, 20. Yeah. We want to make sure we support the immune system. And and by 40 we hit that kind of complete low where we're able to clear out these, you know, unwanted inflammatory cells that just kind of hang out.

But now they're seeing even at the age of 12, you know. So so it becomes that we almost have to start at our children, you know, right at the time, you know, and support their immune system almost immediately.

And so we we kind of set up that generation for being able to, prevent aging and also the different health diseases or the different diseases that come along with it, like diabetes, like cardiovascular, like cancer, like arthritis.

All right. Autoimmune, all, all of those things. So you got to start early. I mean, we, it's it's like right now is the time. So that's fascinating because so we in some of the research we've done, we found there's a gene called foxhole three, which is just correlated to centenarians, people that live 100 plus because they do such a good job.

Of all of what you described of eliminating senescence, all cell reproduction, stem cell production, you know, essentially that what we do as humans, they just do a lot more efficiently.

And so they're kind of staying ahead of aging better than a typical person does. Then you fast forward to today where you're saying the reverse is happening, that 12 year old kids, you know, put it empirically on paper, look like they're 40 or 50 in terms of their.

So so my question to that is, have the kids change or is it environmental toxins or what's going on that would cause

this, you know, phenomenon. So you have all these, these different drivers that can that push a cell to become senescent.

Yeah. So you know, we also have like in aging, we have, you know, the telomeres, you know, that are kind of the end caps of, of your genes. And as we age these telomeres, you know, they get broken up and they get shorter and shorter until, you know, there's almost nothing there.

And then they become very genetically vulnerable, you know, to, you know, we don't have that protection of the telomeres on the end cap. So they become very genetically vulnerable and then can, you know, mutate and, you know, and the protein, you know, tissue regeneration, all of that becomes, completely, you know, faulty.

And then they can turn cancerous and all these different things can happen. And so you're seeing them that there's certain drivers that that push, you know, that that rapid telomere breakdown and also pushing the cell down to become, you know, senescence.

So when the telomeres are very short and the, cell stops dividing and it's kind of stuck in that, frozen state where, you know, the body's not clearing it out, and it's just, you know, causing all, those inflammatory chemicals to be secreted, you know, then it is in that senescent state.

So things like stress, trauma, chemicals, heavy metals, pathogens, all of these things, 5G, lack of sleep, poor nutrition, all of these things. So we'll then speed up the breakdown of the telomeres and more rapidly, then push that cell into becoming senescent.

And what's fascinating is that these senescent cells, so they've done studies that they, they take senescent cells from an old mouse and then put it into a, you know, vital young mouse.

And they see that by doing that, that young mouse then start to then develop the, you know, like cardiovascular diabetes, all these age related diseases or cancer, you know, so that that senescent inflammatory signaling is really kind of kicking in.

So, so we're seeing then that, you know, when, when even somebody that's young and vital and they have that influx of senescent cells, you know, that's impacting them.

So what they've seen then is that a mother that is pregnant with a child, they've able to see that the senescent cells from the mother can then pass, go into the placenta and impact the child.

So the process can even start to take place when, when the child is, is young. So it's it's it's really. Yeah. It's really, really important, to address it from this, this whole I mean, when you're getting ready to, to bear child, I mean get ready for it and.

Yeah, yeah, there's a couple of, you know, I've been, you know, looking at your working with a couple of unique concepts you talk about, and one is, looking at cell debris and circulating of, you know, mitochondrial DNA.

So how is that related to all this? And why do we need to know. So yeah. So one of the important things, I mean, I a couple of things that I'm really passionate about is a regenerative medicine and then also integrative cancer therapies and and the reason why these relate to each other is that the best way to prevent things like cancer is by supporting regenerative medicine.

And you have done the mitochondria as the, as a core component in cellular function. Yeah. That is that is where you produce energy. The mitochondria is the one that supports your, your genes ability to be able to repair itself.

If the mitochondrial and mitochondria is dysfunctional, then the gene is not able it the gene in itself, the DNA becomes dysfunctional. And then, you know, how we repair our body, then becomes dysfunctional as well, and so forth.

So the mitochondria becomes a key. And so if we don't support the mitochondria and, and give it the nutrients that it needs in order to be able to function appropriately and then in itself then start to oxidize and then start to die and break up, and then you have cellular debris of that that gets into, the cell within itself, but also outside of the cell.

So then the immune system, when I look at this debris and, create an immune response to that, which can then lead to then on inflammatory conditions, you know, like, you know, we're talking about, inflammatory aging, but also then like, autoimmune conditions and then also drive the body towards things like cancer.

So, so to be able to then support the health of the mitochondria becomes key. And also to be able to then clear out the unwanted debris that's circulating within the cell to clean that up, and then also to be able to clean that out in the, in the environment and the body overall, becomes key.

Telomeres, Environmental Stressors, and Cellular Senescence

So, and there you have you look at, you know, different processes like, autophagy. And then also obviously just a cellular or detoxification throughout.

You know, the autophagy is that when a cell is just too dysfunctional, you know, the cell should break down and die, and then we should be able to kind of clear out that debris, efficiently, you know, throughout the body by supporting your elementary pathways, you know, which is how we detoxify and how we clean things out.

So, you know, our body can function optimally. Well, another area where I saw you, you have some unique insights in terms of the gut. This is a place where we have a challenge because everybody knows that they should be looking at their gut, but nobody knows what to look at.

Right? So the technology that we have is sort of in development for the most part, especially when it comes to sequencing the gut microbiome. And there's some useful stuff there, and there's some stuff that is novel and needs work.

And so when it comes to this thing that we know, we gotta focus on the gut and it's the source of so much, what do we do and where do we start. So it's it's interesting that there are a number of things that we can look at in regards to the gut.

I mean, frequently, patients come in and they, they've had like a stool test, you know, to, to see, you know, what kind of bacteria or parasites or fungus or, you know, lack of good bacteria that's in there.

Not recognize saying that, you know, whatever is is kind of coming out in that stool may or may not be a reflection of what's going on in the whole intestinal tract.

I mean, because you have, the, small intestines is, you know, 20 some feet long and the colon is only like six feet long. So, you know, what is then coming into the stool may or not be, you know, reflective of what's going on higher up.

And then also, if you do, like a colonoscopy, I mean, now you're only seeing, you know, and the colon or and Oscar, when you go down with the scope to see, you know, kind of the upper, and stomach and upper smaller intestines.

And so it's, there's really no good way of scoping all of that, you know. So now you want to look at, you know, what, what is what is triggering inflammation.

Yeah. Is there an inflammatory process. Are there there's certain is there a, inflammatory process going along, around the gut? You know, are there different kind of bacterial what's called LPs, you know, bacterial kind of byproducts that's in the bloodstream that the immune system is reacting to.

So you almost have to look at it from several angles at the same time. But when it comes down to, to aging, you

know, the inflammation, aging that we're talking about, you know, the the gut dysbiosis becomes such a key.

So then you have to start, you know, going, through the basics, you know, first, obviously you got to poop. I mean, I had I mean, if you don't poop, then where does it go?

And so I had one patient. It was fascinating. First time when I saw her, she was dealing with, you know, menstrual issues and, you know, headaches, fatigue and, you know, yeah, she she was just not feeling good.

So I asked her, you know, so how often do you poop? And said, I'll regularly and, Well, so how often is that? She said, well, every time I have a period, I poop.

Well, I. So, so obviously that is not normal. I mean, the, the normal should actually be. Then you eat your poop. You know, so normal is actually three times a day.

Which in today's societies, that that becomes harder. So you want to make sure that, you know, we have frequent bowel movements, you know, and that's a good stool.

So you got to observe, you know, what does your bowel movement look like? You know, how frequent is it? Get a look at symptom wise. You know, do I feel bloated after eating?

Do I, you know, do I have gas coming up? Acid reflux, heartburn, you know, so you go through, can I do an analysis as to how you respond? And in regards to food.

So that's, that's kind of step number one. And then you can analyze and see, you know, what are some of the foods that may be triggering some of the, effects that I'm having.

You know, I'm eating and and maybe I feel like brain fatigue or maybe my joints are so or or, I just I just don't feel good. So then you can go through and do, like, an eliminator diet.

And, you start with a very basic foods such just start with and then you just add foods gradually and seeing how your body responds to that. So that's a good way of doing that.

You can also then do you know, like I said, a certain blood test where you can then test and see, what antibody responses do I have to certain foods. But they are not a be all and all.

You know, there are just because it's showing negative to like gluten doesn't mean that you may not be reactive to gluten. You know, just because you're not celiac doesn't mean that you're not reacting to gluten.

So so it's important to look at your symptoms. So in addition to the your labs in order to be able to to determine what's going on. And then you just kind of step by step, you know, is am I producing enough hydrochloric acid.

So there's certain tests you can do for that. Am I is my pancreas, supporting a sufficient amount of, digestive enzymes? My liver, am I, you know, is flowing enough bile to be able to digest the food.

Mitochondria, Cellular Debris, and Detoxification

So all these things are actually key components in order to be able to then set up, then what's going on in the rest of the gut and, and, and like you mentioned, the gut is, is such a key when it comes to aging.

Because there's so much inflammatory signals that are being sent from the gut when the gut is not healthy, that is an impacting organs all over the place.

So that becomes like the foundation whenever you're dealing with, with aging and inflammation, aging. So and, and inflammation, I mean, you want to look at the, the gut and you want to look at your immune system.

You want to look at, you know, I am I am I coagulating to fast I mean, am I yeah. How is my circulation? And, you know, you also want to look at. Yeah.

Am I able to clean out the toxins in my body? So it's a bunch of cell debris floating around. And also then looking at the cell senescence. I mean, am I, am I having these inflammatory signals that are being sent all the time?

So that's kind of like the five key pillars that you want to look at when you look at inflammation, aging, and, you know, like you, like you pointed out, you know, I get this crucial.

But that's what you just laid out there is awesome because nobody really speaks about a toolkit or game plan for inflammation. We all know what something to look at.

But you've laid out look at these five areas and you really have a pretty astute map in terms of where you're at and what action to take, because that's the challenge is what do I do?

Where do I start? Right. And until you've measured something, but most people don't know what to measure. So with the senescent cells, you're saying that you're using inflammatory markers to try and predict where people are.

Yeah. So there's there's really no, you know, total at that. I mean, there's really no full test to check for senescent cells, but there are some, tests that you can check to see inflammation wise where you're at.

So, common ones are like C-reactive protein, you know, and then also you have your set rate is a good factor. You also look at, you know, ferritin levels, fibrinogen levels, you know, so these these are good kind of inflammatory markers to look at.

But then also there's a test that's a that I use that at my center. It actually checks your, your urine for from boxing from boxing to and that is, that's a fantastic test to kind of check for overall inflammation.

And with that then you can then monitor and see. So so I have a baseline that this is where I'm at right now. And it gives you a number from zero to, you know, several thousand and a and it's it's interesting to me as I'm working with like cancer patients for instance, seeing when, when their cancer is going down into, you know, becoming more active and seeing that number increase, I was less active, that number decrease.

So it directly correlates with kind of the overall inflammatory processes that goes on in the body. And it's a very simple test. And then you so you you do a baseline and then you introduce a therapy whether you're bringing in quercetin which is a known what's called the senna lytic, you know, which will then break down, a lot of these senescent cells or curcumin or AFib, certain or, these, fantastic, you know, supplements that are that kind of help to reduce inflammation and boost Valium or frankincense.

Another name for it. So then you introduce a therapy after you've had a baseline and then you retest and see, am I making progress or am I not making progress?

And if I'm not making progress, what other things do I need to change? And it's always good to, go back to the basics, you know, in regards to how to address your health.

So, you're talking about, you know, the sanatoriums, you know, and the blue zones, and the kind of, habits that they have. And these are very basic habits that becomes really important.

And you get to have that foundation. Not mind, but, I mean, we do, you know, peptides and ozone therapy and intravenous laser therapy and all these curcumin IVs and all.

I mean, we do all those things at our center, but you need to have that foundation in order to be able to build upon.

Gut Health, Digestion, and Inflammation

And that foundation, you know, is, you know, look at the habits of these kind of blue zone people, like in Italy and Greece and Japan and, and I can't remember, I think is Costa Rica as the other is the fourth one that they look at.

And, it's, it's having a purpose, you know, living a meaningful life, you know, having community, slower pace eating, you know, and I diverse diet. Yeah.

That is, you know, plant based and nutrition dense, and moving. Yeah. Not not they're not really exercising or, going to the gym, you know, but they're moving and they're doing their chores and they're, you know, so they're always they're always active.

So this is kind of like a foundation. And then you can build upon that with all these other cool things that you can do, like the senility or, you know, bringing in, you know, turning on the ATP, using them, intravenous laser or external laser or, you know, bringing in oxygen therapies like, you know, we we do a therapy where you're, in essence, you know, blood goes out from one arm, it gets overnighted in the machine, and that goes into the other arm.

And and that will help to bring down and get rid of all these kind of, senescence cells and reduce inflammation. Turn on ATP, you know, so you can bring all that in as long as you make sure you do the foundation first.

Yeah. I like the way you separated things where there's all the activity that kind of fuels the fire. Right? Yeah. And you got to remove all that and replace it with habits that don't then go ahead into the therapeutics of, for example, some of the regenerative tactics you have and, you know, products that you offer.

But if you're not stopping fueling the fire and you're doing these things to mask your pain point, how different is that from any other, you know, symptom masking, sick care model, right.

You're you're yeah, for sure. You might feel better on that day, but if you're still exposed to the toxin, the whatever it is that that's causing you your issue.

So that's a very smart delineation. You got to deal with both. So in your work with, regenerative medicine, what is an intravenous laser? This is the first time I've heard that term.

I thought I thought I knew a lot, but it first of all, how do you even get a laser intravenously into somebody's eyes? Just blowing my mind right now.

Yeah, it's pretty cool, actually. So, it it is. It's a therapy is called photo by modulation. And that doesn't mean that, you know, it's intravenous. You can do that anywhere. It can do that external.

But photo by modulation, just means that you use light to create changes, you know, within your body. And, and that's it's a really fascinating, you know, therapy.

I, Michael Hamblin, I had a chance to interview him on, on my radio show. He's one of the leaders in the world. And and the research in regards to photo by modulation, using light to turn on the mitochondria, to, trigger the release of nitrous oxide to slow down aging, to, regenerate cells and to, heal people dealing with Parkinson's.

And, so it it's really it's a really cool therapy. So, what we have done at our center is that, there's a machine with a, so you can actually do an optic cable that you three, thread them through the needle, you know, that you insert, intravenously.

And so, what happens then? It and that optic cable, then will then, obviously it will light up the vein and you can connect that to different colors. So we have several different colors.

You have like ultraviolet, blue, green, yellow, red and the infrared. And each color, they have different functions in the body. And so so you can then as the blood then passes by that optic need or that, that optic fiber that's in that needle.

Yeah. That blood gets treated, which means that at every, every point, every minute, you know, the blood will then pass by that point, right? Yeah. So in a session for like 60 minutes, you know, your whole blood volume gets treated 60 times, which is pretty phenomenal because.

Well, yeah, the the other therapies that that's existed in the in the past, you know, one is called UVB or ultraviolet light irradiation. And that's when you, you know, you, you pull like 60 cc, you know, 60ml of, of a person's blood, put it in a sailing bag.

And then you put ozone into it, and then you run that through an old drive and a machine that irradiated with ultraviolet light. So now you're radiating, you know, like 60 cc of your blood, you know, one time.

And here you're, you know, irradiating your whole blood volume. Yeah. 60 times, you know, so, there's it's just like, no comparison. And with that, then you, if you're dealing with pathogens like, you know, viruses, Lyme fungus, parasites or whatever it might be, then you're then able to, you can use some what's called a filter sensitize or, you know, that you introduce in a photo sensitized or like riboflavin or vitamin B2, you know, would be a common photosensitive strand and, and actually will attach itself to pathogens or it's attach itself to like cancer cells and then as and which means as a filter sensitized will then pull more light towards itself.

So, you know, let's say that attach itself to like an Epstein-Barr virus. And, and then as you know, that Epstein-Barr virus and get exposed to, the light that is directly associated with that, photosensitive or so, like riboflavin or vitamin B to, it pulls a lot of the blue light, you know, so you would then pair, you know, I have to do an intravenous vitamin B2.

You would, pair that with blue light, intravenously and so then, you know, when the Epstein-Barr then gets, you know, gets kind of blasted over that blue light and has that riboflavin on it, it will, pull all that light and then oxidizing that virus and killing it.

So it becomes a really effective way of, clearing out pathogens and clearing out unwanted cells and clearing out things like senescent cells and activating the immune system. And.

Yeah, so it's really it's a really cool new therapy that I have been doing a number of years in my clinic. It sounds like there's a lot of precision to it, and you're kind of shortcutting things and going straight to the source.

So I'm assuming that the outcomes are really quick. Yeah, it's it's really amazing.

Measuring Inflammation and Building a Foundation

And then if you combine it with like, you know, you know, like PRP and peptides, like for instance, we, you know, we do PRP into a joint, you know, platelet rich plasma, which, you know, for listeners out there, you you pull blood from the patient, you spin it, collect platelets, which has a lot of growth factors.

And you inject that into the area into the tissue that needs regeneration, you know, then all these growth factors will then be kind of released. And then you can add, you know, peptides like RPC 157 is a common one times in beta four.

Or you can do or you can inject that into the location along with the peptides. And then you can then add then the a laser. You can then kind of enter a articular.

You bring that laser into the areas, you know, right where the fibers over the joints are. And you turn that on and that will actually activate stem cells by like 20 times, you know, wow.

It it really kind of brings everything up to just a completely different level. When you bring light in like that. So when does somebody when does their need graduate from, say, peptides and exosomes to stem cell treatment?

Because there's a lot of people that consider things like cost and jurisdiction where to get it done. So who who's

that person that needs it. So usually and and and it's hard to know actually.

I mean, usually what I suggest is that you, you start with, like pap, I mean, PRP because you start there and and peptides, it's a lower cost easier to get.

And and then you see what kind of regeneration you get. And if, if that does not work then you can then bring in things like Stem cells, and to kind of push that or exosomes, stem cells take a little bit longer to to regenerate.

So usually you don't see that full effect, you know, within. Yeah. Usually it takes at least about three months, you know, before you really start to see what, what's taking place.

Exosomes. If you want to have kind of a quick results, you know, exosomes will help with that so frequently. What, what is done is that you do combination of exosomes and stem cells.

And then so you get that quick repair with exosomes and then also that longer, you know, repair, over a longer period of time with, with stem cells. So, yeah, I mean, we've, we've, we've used stem cells in our clinic and spend has been fascinating.

I mean, we had, yeah, obviously for joint regeneration. It's tremendous what you can do with that. But also then, you know, when, when we're able to do it like intravenously, you know, seeing, had a, an elderly lady and she was in her 80s, you know, dealing with, stage five kidney disease.

And, she didn't want to go on dialysis. You know, she felt she was too old and too tired to do that. Yeah. So. And the doctor gave her, like, Yeah. I think it was, like, 2 to 3 months left to live.

You know, if she didn't do anything. I mean, her kidney numbers were really, really poor. So she chose to come to our center and and, did then in combination with, stem cell IIB, we did an, intravenous laser therapy, nutritional therapy, hyperbaric oxygen therapy, really to kind of juice up the activity of the stem cells to really kind of maximize the effect of them.

And, hard numbers, you know, jump from, low teens. Yeah. I think it was like 11 or 12 or something like that to. Yeah. Now it's and and the high 4050.

And it's been like that for a number of years and she's doing great. So, yeah, it's really, really amazing to see what you can do with regenerative medicine when you introduce these type of things.

And, and, and the, the key is just to kind of support the body's own healing mechanism. I'm just kind of giving it what it needs. You know, the basic oxygen light, nutrients and and then you kind of bring in some, youthful stem cells.

Yeah. For sure. And, and what a blessing that she was able to find you because so many people will never hear in their lifetime, at least today, that things like this even exist, you know, and it's unfortunate, but I believe the future is this will become common practice as it's undeniably a path we need to go down.

Photobiomodulation and Intravenous Laser Therapy

You know, stories like that that I hear, I wonder, how do people find somebody like you? Like, where did where do they eventually get to this place? Where I need to go to your center.

And I obviously, at first an individual has to be aware of what is possible and what is available in order to be able to know what to look like for, you know, I, I, I've been doing this for 30 some years and, and I'm really big into education.

That's why, you know, I have a couple of podcasts, have a radio show, TV show that I ran for a number of years over at on Amazon Prime. So it and to me, education becomes key and I think and that is what's so amazing with

these kind of summits and what we're doing right now is just to allow or to kind of have the public know of what is possible, what exist out there.

And we'll exciting with regenerative medicine is that, it is escalating or I mean, it's accelerating, quickly as to what we can do in order to be able to support the physiology and the function of an individual using these natural, safe therapies.

And, so it's it's really it's a it's an amazing field and really exciting. And and it's, I think it's important for people just to recognize that they don't need to rely on just symptom management, using pharmaceuticals.

They there are tools out there that's available, to support the body's own healing mechanism, you know, but you you got to start at the foundation, like we discussed before, you also got to look at, you know, what my ability to do in addition to, you know, working on the gut, you know, how am I?

How am I detoxifying? Like, you know, the mitochondria exist, you know, within, a certain environment, you know, the mitochondria is where, you know, again, we've talked about that's what produce the energy and that's what repairs to Sal, that's you know, that's what makes you feel good and young and strong.

And, the mitochondria is dependent on obviously the, the fluid that's around it and what exists in it. So if that looks like a dirty fishbowl. Yeah, that mitochondria is not going to be happy if it's a clean, healthy fish bowl, you know, where the water is clean lots of nutrients in it.

That fish is going to feel awesome. And it's yeah. So the key is just, you know, get a support detoxification. We gotta control inflammation. We gotta bring in nutrients into the system, and we gotta do the different steps that's needed for a healthy mitochondria to function.

And oxygen. Yeah. Reduce stress, you know, bring in meditation. You know, bring in all these different things that that really, you know, is is key for your mitochondria to function.

Well, this is awesome. You know, I think of what you're discussing now in regenerative regenerative medicine, people think of it as like, you know, I have a tear in a muscle or I have joint pain.

I'm going to use this product for like a targeted sort of focused problem pain point. But really we're talking about, again, both ends. Right. Go ahead and do that.

Regenerative Medicine: PRP, Peptides, Stem Cells, and Exosomes

But create the terrain, create that environment where the body is thriving and get the benefit of both. Yeah. Acutely deal with the problem. But that problem happen because the system that the problem happened within is was ready for and ripe for problems.

Right. You got to first get the system down to turn the dials down and get everything going properly, which beautiful about the work you do. So if somebody wants to work with you in your center, how do they find you?

What? Where do they go? Well, so the best is just to, look me up on my website. You know, it's that Carl, folks on intercom, and Carl Felts is one of those.

I mean, yeah, I'm. I'm sure you have the spelling here on the on the interview. Well, sure. Yeah. I mean, just give us a call. It's, (208) 338-8902. Yeah.

And and just schedule and we it's not just myself. We have a bunch of different providers that that are incredible. Orthopedic doctor, people, you know, doing the regenerative medicine, we, you know, a bunch of nurses, nutritionist, so we, we got a, we got a whole team and, and the whole, our desire is to create a place where a person can go no matter what their need, is that we can then address it there, you know, with, with really powerful therapies, you know, that does include, you know, peptides, you know, or liquid allograft stem cells or, you know,

intravenous nutrition or, you know, laser therapies or hyperbaric oxygen or, you know, ozone, almost like an ozone dialysis where you clean the blood, you know, using ozone and oxygen and, you know, doing all these things so that, a person can feel like they can just kind of step in and hang out and be, you know, and regenerate, you know, and one location and what city, isn't it?

It's a meridian, Idaho. It's just outside of Boise. Yeah. So it's it's it's a it's it's it's it's a really cool place to live. But don't tell anyone. Amazing.

Well, I guess I'm planning my next vacation. I'm coming to Idaho, going to get some regenerative treatment and see what's going on in Boise. Yeah, you should come and hang with us.

Finding the Clinic and Final Takeaways

And then obviously, I mean, in your expertise, you know, dealing with, DNA and, you know, the how they function optimally, you know, then bringing all these things in to, work on the epigenetics, you know, how sure, how DNA turn on and turn off, you know, by, you know, maximizing your, your cellular function for that becomes key.

Yeah. Well, this this was an incredible thank you for, you know, opening up and telling us all about what you do, but really helping us understand what we can do to, you know, tackle inflammation and just live longer and healthier.

This is amazing. Thank you. Yeah. Absolute. My pleasure. Yeah. It's it's a subject I'm passionate about and it's everyone should do whatever they can to reduce inflammation.

Awesome. Thanks again. My pleasure.