Introduction and Guest Background

Welcome to The Parkinson's Solutions Summit. I'm your host, Dr. Ken Sharlin. Today, I have a special guest, Dr. Geo Espinosa. Dr. Geo. I have known him for several years, and I'm so excited to be able to have him on the Summit today.

Dr. Geo is a naturopathic doctor. He is an academician who holds, titles at the New York Langone Medical Center. teaching integrative, medicine and urology.

he again has a specialty in urology. And that is such an important topic when it comes to Parkinson's. So, Dr. Geo, thank you for being on the Summit.

Really great to have you. Dr. Sharlin, what a pleasure. Thank you for inviting me. Well, Geo, I wonder if we can just really, really start at the basics, and then we're going to get right into why this is relevant to Parkinson's disease.

But I want to make sure that folks understand a little bit about naturopathic medicine and how your background in naturopathic medicine took you then into the urological space.

Folks, I am saying urology early allergy, not neurology. but you know, that's just the other end of the nervous system. So. That's right. I always say waist down, not neck up.

So tell me, tell me a little bit about that background. Yeah. So thanks for, for for that introduction. And, and when I tell people I do specialize in urology, I was like, wow, neurology.

You must be so smart. And then a waist down, waist down, that neck up. so again, thanks for having me, Ken. Look, I it all started when I was a medical student at naturopathic medicine, and, you know, you're trained as a naturopathic doctor to treat the person, not the disease.

So it's almost like you shouldn't specialize into anything, right? And then so along those lines, you learn the conventional methods. You learn the natural message.

You know, the homeopathic remedies and for all diseases. And I just felt uncomfortable with that. I always felt that, perhaps I wasn't smart enough. I mean, how can they all get in and not me?

Why? They know these remedies for all these, does it? Not me, I just didn't I just didn't get that. And, and again, the concept of treating the person, which, you know, I'm a fan and, you know, when in doubt, treat the gut.

And then from there, you know, good things happen. So those are the basic principles which I still abide by. Still in all when they came and they're saying, oh, look, I'm taking these meds for whatever my heart disease.

Like I have to look up these meds or meds for dementia or meds for prostate issues. Then, you know, my dad was elderly, having prostate problems, and I just started diving deep into, you know, what's out there for, you know, prostate.

We're talking about 25 years ago, you know, BPH, urinary symptoms. And, you know, from a very young age, even before I decided to be a physician, my dad was always talking about his prostate.

I feel like the first organ I ever learned about was the prostate. Not the heart, not the brain. My father, my prostate, my prostate, my prostate. He and he was as I you know, he had me when I was born.

He was 47 years old. So you can imagine I'm ten years old. He's 57, 13, he's 60. So he's already at an age that,

you know, he's having some of the urological issues.

then I go to a naturopathic school and I track that when I do my medical, services, I attract a lot of men with prostate titers and so forth. Testosterone.

And then I had the great fortune of doing a, like an internship with a local urologist in a private practice. And I just fell in love with the field of urology.

slowly after that or shortly after that, I went to Columbia University Department of Urology, where I was working with, one of my mentors, Dr. Aaron Katz.

And he was the the founder of the Center for Holistic Urology at Columbia. And I just I just immersed myself into all things urological function, including seeing some of the patients with Parkinson's disease who were having urinary issues and some of those who are having erectile issues and so forth.

And then I've been at, a after that, I went to NYU, where I am that now I run the Holistic and Integrative Urology Center there, and I've been there for 15 years.

So I think that, you know, more than, more so that I chose urology. I think urology chose me. And I kind of went along with it. And sorry. Let's see what this goes.

And, you know, 20 something years later, here we are. so I'm very, very happy and fortunate. That's the route I took. I took. You know, I want to share just very briefly, sort of the epiphany or moment that I had and all of this and that is, you know, I came up the ranks as a pretty traditional allopathic doctor treat.

The disease ultimately became kind of disillusioned with the entire approach and all the problems associated with taking the person out of the picture.

and then of course, discovered functional medicine. became certified. And it's sort of all I wanted to do, wanted to not have to prescribe medication.

Common Urological Issues in Parkinson's

And I still certainly, put the patient in the center of the story. And if we can do things without medicine, where it's the fewest medicines or the least possible dose, that is definitely optimal.

But I would say, and this is especially true with Parkinson's disease, that I have tended to, adopt the term into creative medicine much, much more and say, look, we absolutely have to put the person at the center of the story.

It is there narrative and recognize that every person with Parkinson's is different, but it's virtually impossible to address Parkinson's in the long run.

It's not 100% impossible if we don't address dopamine through leave a dope at therapy, that has to be at some point in the equation. Part of what happens.

You might have such early mild disease, you don't need to leave a dopa, but chances are you eventually will. Yeah, I love that approach. Ken look, I trained in naturopathic medicine and what I learned through over 20 years of working only.

I've only worked in medical institutions with allopathic doctors, urologists, and I'm happy of the approach that I took, which was. What what it was it was, allopathic medicine doesn't work.

And that wasn't. Now, we all know the holes, and we see the holes when we see them, and I recognize them. But my approach was, when does it work? when. Does it work?

And what kind of procedures actually make a difference? Right. And what pharmaceuticals can actually help with, you know, very little to no side effects.

Right. as an example, you know, many of the, overactive bladder drugs, some of them are not great. They actually induce dementia, right? But others are actually don't do that and can bring some results.

Right. Pde5 inhibitors, as it relates to erectile function rather than. No, only natural. So when does it work or what's the right dose that it actually you know, we know it doesn't take care of the cause of the erectile dysfunction.

We know that it's a is a bandaid. But men need and want a Band-Aid sometimes. And it's okay as long as the side effect profile is low. So I'm thrilled that you said that.

And really the the holistic and integrative approach is the way, you know, I took my patients ask me, what would you what would you do? I said, look, I have biases. I'm a human.

You don't care about my bias. You shouldn't care about my bias. My job is to help give, suggest and recommend things that are right for you. Specific to what you have.

So I think that's the where in medicine it's all about best medicine, not this medicine versus that medicine. That's the way I see it. Yeah. And we you know, I'm sure we'll maybe talk a little bit more about erectile function because it's so important.

And you know, to folks, to men affected by Parkinson's and their partners. but on the other hand, you know, we can write a prescription for a drug that that improves that situation.

We can educate our patients on nitric oxide. We can educate them on diets to ultimately improve their nitric oxide production and therapeutic lifestyle factors that go hand in hand with that besides diet, exercise, sleep quality.

Right. All of those things that can really synergistically make a huge difference for folks. Yeah, for sure, for sure. Well, Geo why don't we just kind of start off with just kind of listening, talking about what are some of the key or most common, urological concerns that people often face with Parkinson's disease?

Yeah. So that's a great question. so the most common, the most common symptom that, may particularly, so I see mostly men. Right. So we know the urological issues occur both in men and women, but I see mostly men.

So, probably as I see what I say, I probably will be focusing more on men than than women in this particular case, what they seem to, suffer from most is, three things.

One is nighttime urination nocturnal. That seems to go up significantly in men, after they're diagnosed with Parkinson's disease. the other is erectile dysfunction.

We could talk about that and elaborate that a little bit. And the third, that is not a urological issue is, is cognitive decline seems to happen sooner and more often in men than in women.

So, those are the big three in my mind. And when I say not Turia nighttime urination, I really mean overactive bladder and overactive, you know, urinary frequency and those kind of things.

So, so but but the nighttime urination, because it creates such a negative impact on one's health, because they're being interrupted from their sleep, it's significant.

Well, let's just kind of go through that, and start with this idea of urgency, frequency and just getting up in the middle of the night where then sleep is disrupted.

No, no, no, I'm assuming you're seeing similar things that I am seeing, but a lot of times I find the guys are getting up to going to use the restroom and they're actually peeing very little, right?

They have an urge to pee. Correct? That's right. You know, might only be a few few milliliters or, you know, an ounce or two of yours. I mean, they just because they just got up an hour before that and they already empty their bladder.

So yeah. What happens. So you should have the capacity to hold a significant amount of urine at night. Right. And even during the daytime, you know, you should have the capacity to hold significant.

we're talking about 200 CCS. It's not. So when we do, post void residual. Well, we check the bladder with an ultrasound after they, they voided if they have 100 CCS and things, that's that's not a completely abnormal.

The problem in the case with Parkinson's disease is when they have even less than that, and the signals are sent to the center of the brain to and tells them to.

I need to go pee, though there's not a whole lot. So there's hypersensitivity with the nerves that are in the inside. inside of the bladder and called the the truth or muscles.

So there's, there is hypersensitive sensitivity of these nerves. And that's all associated though it's important to know that these that particular situation happens often in people without Parkinson's disease.

So it's not only as it relates to people with PD, but it seems to exacerbate when when they're when they have PD. So the other element is that when people have PD they get disruption in their sleep.

So it's a chicken and egg scenario. What comes first is that poor quality sleep that you know, gets them up. I ask this question to all people that come to me with nocturnal or nighttime urination problems, what what comes first?

And then we look at sleep a little bit more deeply. but yeah, that's a very common scenario. And, and very frustrating for the patient. Right. So they are, you know, as you can imagine, fatigued and, they don't recover from their day.

and I think that tends to exacerbate symptoms, the PD symptoms, the, the mood symptoms. So, you know, it further supports the idea, or encourages the idea that, you know, the importance of sleep.

No doubt about it. And for example, fatigue is one less common complaints that people have with Parkinson's. And then looking at it from a holistic, integrative functional medicine perspective, the disruption of sleep has all kinds of implications.

The activation of our biological stress response system, which is going to be turned on if for no other reason than, you know, in order to try to stay awake and function during the day, you have to be pumping out all this cortisol and adrenaline, and then you've probably been paying more, you know, a result, you know, so all of these things really have a downward spiral effect.

And I'm curious because, I'm going to do a little bit of explaining for folks watching this to make sure that we're not sort of just talking as colleagues, but we're, you know, but, so many men suffer from an enlarged prostate and that urethra, the P tube, if you will, passes through the prostate gland so that when the prostate is enlarged, if it's squeezing down on the urethra, the male gentleman may not fully empty the bladder.

Which is why, shortly after thinking they're done peeing, they're back in the restroom peeing again. But my question is this in Parkinson's disease, where we have that frequency urgency?

Not sure yet. Surely at least a proportion of these men do have BPH benign prostatic hypertrophy. But I'm wondering, and I'm willing to bet that a substantial or perhaps disproportionate number do not.

In other words, is are we just really kind of say, well, all of this is BPH or actually it's Parkinson's with some of them having BPH, does that make.

Sense? That does make sense. So what's the real cause of their urinary problems? Is it BPH or is it Parkinson's or is it both. So the first thing that the listener needs to know is that one can have an enlarged prostate and not have prostate related urinary symptoms.

Only when the squeezing occurs around the urethra is when you have prostate related urinary symptoms. That's very important because there are people with small prostates walking around and they squeeze the urethra.

There are people with large prostates I've had. So for the audience, a normal sized prostate is the size of a walnut.

Bladder Symptoms vs. BPH

We got 2020 five grams right size of a walnut. I've seen a small orange like a tangerine. I've seen an orange, and I've seen almost like a grapefruit.

And, you know, so grapefruit, like 300g there. I've seen 200g, 250. No urinary symptoms. That's an incidental finding. I seen 40g. And they having urinary symptoms related to the prostate. Why?

Squeezing the urethra. Right. So it's very important that, to know that an enlarged prostate does not always equate to urinary problems. That's number one.

So what we really want to find out is, is the prostate squeezing or not. Typically they'll complain about slow stream. That's the number one complaint right.

Because there's an obstruction in the stream. And it's likely related to the prostate. So they would say yeah my stream you know some people. So I've had patients who say, look, I'm brushing my teeth.

And you know, my, my toothbrush is set up for two minutes. And that's the amount of time that I take. So you brush your teeth and and go urinate, at the same time.

And they say, yeah, it takes about two minutes. Right. So that's that. Parkinson's disease is not associated in any way with any prostate disorder that I know of anyway. Right.

But sometimes people with Parkinson's disease get diagnosed with BPH or BPH symptoms. Right? Meanwhile, it's more like an overactive bladder scenario.

Urinary frequency that is affected by the symptoms, or the nervous system that's affected from the Parkinson's disease. Right. So. The thing is that, as my friend would say, you're going to blame the organ you have so you wouldn't tell a woman.

Well, is your prostate. The problem is that you would never do that because women don't have a prostate. Men come in and particularly after a certain age is that, well, that's a prostate problem.

And I think that's just a kind of lazy approach in my opinion. You got to do the due diligence and it might not be the prostate. I tell you, oftentimes in my practice, it's not the prostate, it's something else.

Overactive bladder causing urinary frequency caused by what? And then the by what could be many things. And it could certainly be Parkinson's disease.

That's that's thing. So it seems like the from the right a prescription perspective that simply putting somebody on a flomax is not really going to necessarily address the problem.

Yeah. So that's a very, so flomax or five of five, four for, alpha blockers is the category of those drugs, whether it's tamps loosen or, there's a few others in the market.

they're actually looking at what drugs actually work with minimal side effects. That's a good those are good. They

actually do work. But what happens in this case is that they get on the drug, which alpha blockers, what they do is they open up the prostate.

So they compete better. But their symptoms are not that they don't improve. They actually have more frequency and more knocked area or nighttime urination.

So that is, you know, that's an approach by process of elimination, you would say, okay, that's not a right. And then you would put them on OAB type of drugs, overactive bladder drugs.

And he said, well, that's not working. So then you have to do a further workup. But then the patient probably has tremors. That's to some degree. And they've already been worked up by a neurologist.

From a naturopathy perspective, what are some of the recommendations you're giving to your patients? All right. Well let's so let's to stay in topic. You know, let's say somebody with PD and urinary problems right.

Yeah. The first thing I give them I give them is melatonin at night about 3 to 5, 3 to 5mg at night. Okay. there's good data to show that they sleep better milk, better quality of sleep.

so there again, I think that sometimes the nighttime urination issue is more of a poor sleep quality. They probably never get too REM and deep than, than a urinary problems.

So that needs to be worked up. So melatonin is very important. acupuncture works very well. And I've written some, scientific papers with other authors, reviews on acupuncture in terms of its effect on, an improvement on overactive bladder.

I, it wasn't specific to patients on with, with PD, but just a general overview, which I think can translate very well for patients with PD. you know, what I'm trying to do here is calm the bladder more this overactive bladder.

Right? So I give, let's call it nerve genes. these is a group of botanical herbs that kind of combs the system down. Some of them are very specific to the bladder.

So one that you will never find. And it's difficult to find. It comes in tincture, but it's out there if you really look hard. It's called Keller. Kohler.

So wonderful. Herb calms down and it's very good for the urinary, urinary system. The other that I use is kava kava I use for process itis. I used to really calm down the the pelvic, the pelvic system.

The pelvic urinary system. Now, I use mostly tincture and kava. You can also use in pill form. And kava again calms the system down. I think that your audience, some of your audience member, audience, audience members who are listening so well then and I hear something negative about kava, something about liver toxicity.

there was some data, some information published on liver toxicity. I've never seen it in 20 something years. And that was more of a, you know, that kava was one of many things that these patients were taking, so I'm not sure that it was kava related.

and I measure, ast and, alt and patients, these are liver enzymes, when they, you know, before and after they go. And I've never seen a problem. So I think that patients shouldn't really worry about it.

And I think patients with, who have liver disease should, you know, get expert advice. I even in that case, I don't think it's a problem, but they should get expert advice.

So anyway, kava is very important and very good at nighttime, along with melatonin. I want to give them more things to calm down their system. Some of that is magnesium.

like magnesium glycine eight pretty much for that purpose. I know a lot of people like magnesium three on eight

quite a lot. It's just that magnesium three on eight is a bit more expensive.

And I see the same benefits for magnesium glycine eight than I see with magnesium 3 or 8. So magnesium likes in it at night. also something like passionflower, lemon balm, school area.

These are all herbs that seem to calm down the nervous system. So in this particular case, I'm trying to really help them with their symptoms. I'm not trying to cure Parkinson's disease in this case, and I and it's never really the case.

I want to, for people to do better, maybe can you can chime in, and I know you're interviewing me, not the other way around, but I want what I give them.

Natural Approaches for Urinary Symptoms

fat soluble, antioxidant and a lot of anti-inflammatory, herbal, anti-inflammatory. So I go pretty high into curcumin. I also do Brazilian quercetin. Those are like my top three natural anti-inflammatory.

That seems to have a lot of a great systemic benefit. I also do for the in terms of Antioch, since I do vitamin E as a as a fat soluble antioxidant. so that's kind of my concoction of supplements, herbals and, and vitamins.

Along those lines. I'm just curious because there's actually some literature, I don't know if you've seen it on ashwagandha. yeah. As disease modifying therapy and neuro protection in Parkinson's.

And of course, it's an adaptogenic as well. I'm just wondering if that's in your toolbox right. So in terms of, ashwagandha, you know, it's under that category, as you said, of Adaptogenic herbs.

That's my favorite category of herbs is, ashwagandha. it's adaptogens within that. Ashwagandha is for me, is the king or the queen of adaptogens? I probably use ashwagandha in every case.

very little downside. A lot of upside, pun intended. There seems to be benefit from an erectile, element of it in, testosterone and things like that. helps with sleep, helps with cognition.

and it helps with energy. And now I think he just taught me something, that there are neurological benefits to ashwagandha. So I didn't know that research.

So ashwagandha is probably in in, it's almost like I mean, it's I think magnesium, everybody takes it to some degree, depending on what type of magnesium.

Depends on what they're coming in with. you know, they suffer from constipation and they take oxide and citrate depending on the situation. But, you know, magnesium, ashwagandha, curcumin to some degree or another.

everyone I think takes and and vitamin D, I think everyone takes it in my, you know, and then and then more specific. But yeah, thanks for mentioning that.

And in the summit we really like to emphasize the sleep movement, nutrition, the mind body work. You've touched on acupuncture. Just wondering about does diet or exercise to your knowledge have some impacts on this issue.

So, you know gun in my head, what's the best. Most important therapy that, natural therapy that does the most for you. It is exercise. You got to move it.

Some people sometimes misunderstand when I say that as a they take it as if what diet doesn't matter. Right. It's not that diet doesn't matter. What it is.

Is that what's a good deed? What's a bad diet? Right. That's what the Diet war is, I call it. that's a different conversation that, you know, I'll get into some of that.

But the point I'm trying to make here is it depends. Do you move your body? Low intensity, matter intensity, high intensity. Because what you do with food in a body that moves often and what your body does with that food is much different than a sedentary person, regardless of what the food is.

Right. So again, I'm not saying that diet doesn't matter. It does matter. But I believe that the biggest, you get the most bang for your buck with exercise, particularly with neurological.

So, you know, as it relates to any neurological disorder, particularly, let's say, a Parkinson's disease, I think weight resistance training to some degree catered to you, level of fitness, so forth.

Is the biggest and the most important thing that they can do. Why? Because particularly when you start lifting a little bit heavier weights and again, it has to be very specific to the person that don't get injured and so forth. You gotta train for it.

You gotta work yourself up. All these things when you strength train, you're not working the muscle as much as you're working your nervous system. strength training is a nervous system.

Exercise. Bodybuilding is different. That's doing a lot of repetitions. More than 12 and 15. Now that starts affecting. And there's some overlap of course.

Sure. Right. But when we're talking strength training that's a nervous system, phenomenon. And I think that that needs to be a critical component. And I think we could do more to be more prescriptive to the exercises that we prescribe our patients, as opposed to exercise or get on a treadmill or lift some weights.

I think we have an opportunity to be more prescriptive. Oh yeah, about 2014, I was introduced to the principles of CrossFit. I, I don't do CrossFit now, but I did cross that pretty hot and heavy for a couple of years and no.

Injuries when you did that. Well, I did, and that's not why. That's why I'm not doing it in part, but but, I, I had lifted weights pretty much all my life off and on, but I was really never introduced to the principles of Olympic lifting, and that just blew my mind from a neurology perspective.

Yeah. Because to your point, Olympic lifting is not bodybuilding. And some of the most amazing Olympic lifters that were in my CrossFit gym, where some of the smallest guys.

Yeah. Dude, they you did. And they, I mean, they they were lifting some serious weight, but it was the, you know, you have to practice those movements, right?

You have to. It's all about form and the ability to use your core and to move things in almost a superhuman way. And the minute you start relying on your arms, in particular to lift these weights, it's like, game over, right?

You'll never get there. No, it's it's I, I, I if you have to choose one right. You if you have to choose one. And I know that, this is tricky because I run, I love to run.

And so that's the most important thing, you know, VO2 Max. And it is. Yeah. But if I have to choose one you from strength training, you get VO2 max, you don't get VO2 max, you don't get stronger from running.

So you get a lot of benefits from from strength training. And probably getting back to the urological, your strength in your pelvic floor and the process and improving your ability to yeah, when you want to and not when you don't want to.

Yeah, yeah. You said something. I have your some notes that you were kind enough to provide. And I love this because first of all, I learned two new words.

I had to look them up. I want to read this, and, here are your thoughts. postural issues like Kim to Cormier and PS, a syndrome or more common in male patients and can exacerbate urinary symptoms.

Those are wonderful words, by the way. I don't know how I got through my career at not knowing them. When I look up, those words are like, oh yeah, well, let's, you know, but still great words.

And talk to me about how posture, how dystonia, how position, you know, plays a huge role in neurological symptoms. Right. There again, is it's nerve.

It supports neurological health. People are very focused on muscle and, you know, muscle centric is a term that to use muscle centric health muscles. And yeah I get it. It helps with metabolism.

I think that the name of the game is well, it's all of it. We don't have to choose. One is not a buffet, right. But it helps with with neurological health.

Right. It's health which, you know, there are studies that support that posture. Right. People with better posture, people that are stronger grip, grip strength is how they measure strength because it's easy supports those with grip strength, better grip strength, which which suggests that they're stronger had better, have less, urinary issues frequency, urgency, hesitation, not Turiya, etc..

Exercise, Posture, and Movement

one of the things that, men with PD have, it's also sometimes incontinence. They develop incontinence. Well, stronger people typically have stronger pelvic muscles and don't have incontinence, issues.

So so posture, you know, it's it's associated because they are just have stronger bodies. And I would say, healthier new neurological health is stronger.

One of the best things I've personally found to really work on posture and ultimately to trigger some neuroplasticity, meaning in this case that, I don't have to think about standing straight or bringing my shoulder blades back and so forth that it just happens.

It just happens. Yes. Is yoga. I'm just wondering what what you found. I just find if I'm when I'm consistently doing yoga and it's really only usually a few weeks of going to the yoga studio, I'm standing taller.

I am, I'm standing straighter. I'm wondering what you've discovered in that regard. from a yoga perspective. All right. Let's break this down a little bit, and then we'll come.

We'll break it down, narrow in on PD. Right. Well, what are we trying to accomplish? We want to function well. So not only do we want to and this is of course people with PD, but in general part of functioning well is pliability of muscles and joints.

I think yoga helps with that quite a bit. I do think that, I maybe is my bias as well, because when you're doing things like deadlifts done right and weight training automatically, you're the core muscles to the back muscles.

You know, I post things on Instagram of me squatting and everybody's like, watch your back, you're going to hurt your back. Back muscles are muscles and they get stronger.

If you do things properly. Yes, don't go too high too soon. They get stronger. And so then that helps with posture yoga. There is you know, you do a lot of depending on the type of yoga you do.

Of course. and there's quite a few I want to have 12 types, some of them that is more strenuous than others. And that helps with, with strength and, and particularly when they do, that body type of movement and, you know, plyometric type of movement, it gets through.

So that's I, I love yoga, I, I've utilized yoga can more in my life, from the perspective of, helping me with flexibility because I do lift weights, but I don't want to be this husky guy going around like this.

Right? That's the last thing I want. And it helps me stay smooth and and pliable. so, Yeah, yoga or or any, It depends. Whatever you're into, you know, from, from an exercise perspective, it's like, what are you into? All right. Let's work around that.

Yes. What you enjoy, you will do the most. Yeah. we have plenty of time for the interview. and I just want to make sure we sort of divide things up. And I want to talk about testosterone and erectile function, and then any, any.

I know majority of patients you see are men, but make sure to pay attention to the women and give them a little, due time and attention. so does it make sense?

Maybe we could go into testosterone and from their erectile function or the other way around? Yeah. No, let's do that for sure. I can start. Go. I think what I know from the literature as it relates to hormones and Parkinson's disease is, the value of estrogen, For the last several years, I've looked at estrogen and its effect on men and the importance of it.

Right. So why? Because in many cases and so many, you know, when they go to these, longevity of longevity clinics, right, a way to give them, aromatase inhibitors.

Right. What aromatase inhibitors do they inhibit the production of estrogen. Right. In men. So boost them up with testosterone, aromatase inhibitors right away without testing.

I think that's a problem in men specifically. Oh yeah. it seems like in women that so men are at a higher rate of developing Parkinson's disease. And I think that equates itself after women reach menopause, suggesting that there's some benefits from estrogen.

And it seems like that doesn't happen as much in women who are on estrogen even after they reach menopause. Okay. So the name of the game as it relates to both genders is that estrogen is important.

There seems to be antioxidant activity. There seems to be protection. Right. So both testosterone and estrogen passes the blood brain barrier gets into the brain, and it does a lot of wonderful and important things.

there's estrogenic receptors in the brain for men as well. Right. And it seems to have antioxidant anti-inflammatory activity. So so for men. The ratio that I like to see and it's all about ratio is roughly 15 to 20 to one.

Testosterone to estrogen in general. So the benefits of testosterone is important in that regard. I don't know. And it's a benefit of testosterone. It is also the, the the the preservation of muscle through muscle.

You can do activity. So let me break this down. Does testosterone have any benefit to Parkinson's disease. Well I would say if one has a benefit it's probably estrogen more than testosterone.

Interesting if but you get the benefit of testosterone because you build you have more muscle and it does have erectile function. And it helps with erections.

So quality of life there is some beauty, maybe some even therapeutic elements to engagement with and in a loving situation. And having intercourse and all those wonderful things that men want to do.

Despite having PD. You preserved muscle. That means you move more the more you move. We already spoke about exercise, right? And how important it is. So maybe the benefits of testosterone itself, as best as I know, is to muscle preservation, erectile function.

But if I have to say, of course, there's no randomized trials on giving estrogen and no one wants to give estrogen. In no circumstance should a man either be given estrogen or given aromatase inhibitors to inhibit the production of estrogen.

I have not seen a case. Maybe. One, maybe one out of 200, actually, when the estrogen level was just too high.

Because the way men make estrogen is from conversion from testosterone is not from the development of like women make it, and secrete it from their ovaries and so forth.

Men don't is conversion so even when the estrogen levels are higher than they should be and it's like, read on the lab report, all I care about is the ratio is at 15 to 1 to 20 to 1.

That's it. Yes. and I always like to say that, first of all, you may not, may or may not be aware there's a substantial body of literature that has recognized that the heralding the onset of motor symptoms in Parkinson's disease in men is often an abrupt drop in testosterone levels, and there appears to be some connection, at least in some men, with a drop in testosterone and even testosterone deficiency and the onset of Parkinson's.

Now, there have been some studies published in major journals like Jama neurology looking at, well, does that mean that maybe we should treat men who, with Parkinson's, with testosterone?

Hormones, Testosterone, and Erectile Function

now, to me, this is a little like the studies that some of my allopathic colleagues like to quote, because, you know, you and I, as more holistic physicians, do give people individual nutrients for various specific reasons.

And they go, well, that vitamin E study failed in Parkinson's. But do you eat one thing all the time. Right. That I mean, you know, or the whole thing that's often, you know, the analogy to very often used in functional medicine about, you know, you have the bucket of muddy water and you're trying to pour clean water in muddy water and then expecting the water to be clean.

Well, you're just, you know, making more muddy water and we don't want people to think that giving them testosterone is sort of the be all and end all right of managing their Parkinson's.

But everything that you mentioned, both from a, you know, anti-inflammatory, antioxidant, so neuroprotective and growth, we don't really touch on repair.

It's a repair hormone. Right. So you want to. Sure. ALS. yes. So repair is critical. And then some of those indirect benefits that have already been alluded to, you know, one thing that's very common in Parkinson's is falling, right?

So if you're stronger and it's not just going to happen with testosterone alone, but that can help, then you may be less likely to have that fatal fall.

so, so many, many benefits. 100%. So let's break that down a little bit. Can. First of all, my what I do in my work is I try to optimize testosterone levels naturally without TRT.

That does not mean that I'm opposed to TRT. I'm a fan of TRT and I think for the right patient it does wonders. So the conversation is should we optimize testosterone levels whether naturally or through TRT in patients with in male patients with, PD?

And the answer is yes. Downside? I don't know of any. I'm sure there is. It's not a problem for the prostate. It does not cause prostate cancer, does not cause cardiovascular disease.

The cardiovascular disease scenario. It's just got debunked okay. Recently in a in a study. Yes. Right. Where they looked at because the the idea in a previous study.

And this is why the confusion they had looked at people with a who were already, who already had cardiovascular disease game TRT and increases the risk of heart attacks.

So now they study people who with a history of cardiovascular. They look at 5000 people multicenter trial showing that even those with a history of cardiovascular disease did not get, heart attacks or any cardiovascular problems once.

They won't. So that's that's a non-issue. So a lot of upside, including feeling good and feeling, you know, just feeling good. How about that? Yeah. That's exactly that's exactly what my page.

I'm sure yours say like it's just wow. Wow. So very little upside very little downside a lot of upside. So yeah I think all men with PD should have their hormone levels tested and optimize their testosterone level.

That that should be one of the it should be part of the, of the lab work and their workup. I just, real quickly, you know, optimize what does I use the term.

But I want to make sure that. All right. That means now we're getting into some nitty gritty here. Can. The reason there's confusion. Optimal. Well, total between 500 and 600.

Well total about 800. Well. All I care about is for the free percentage of testosterone to be 2% or higher. Period. End of story. Period. End of story. Okay.

Because total doesn't matter. What matters is to free. Yeah. And it needs to the free percentage should be 2% or higher period. End of story. What does that mean.

That means that I have a patient with 400. Their free percentage is two point to 2.0 or 2.1. Whatever. they're good. More more doesn't make it better.

I have a patient with 800, but they're free is 1% or what. So total is good, but they're, they're, free percentage low. I want to free it up. Okay. And I care about the testosterone estrogen balance as well.

Okay. So that's that's that's the name of the game. Absolutely. And, just I know we're going to we're going to talk a little bit about women's urological health that are are you seeing the optimization and women?

I'm just curious if you're using any testosterone in women or what's been your approach in that regard? My approach to that can is zero and I have zero experience in that.

So I would be totally guessing and pulling things out of the air in that conversation. Fair enough. I have no idea. Fair enough. Well, we we do have some some guests as state.

I'm sure. Sure. Yeah. That those things okay. Erectile function a major problem that men experience many men as they get older. But especially problematic in Parkinson's.

Yeah. So I think men with proper testosterone. can function well. But remember, the biggest sex organ is not the penis is the brain. As. Right? So if there is performance anxiety, as you have, if the, as the trembles occur.

And so, you know, the, the, the patients that I've seen that have done well with PD and sexual function are the ones that have been in a long relationship with their spouse or significant other, who are not worried about, I have to hit a home run to night and, you know, you know, hit a grand slam.

And, you know, they just go and have fun and then make it happen. Assuming they have good testosterone levels, perhaps they need a little Pde5 inhibitor, whether it's cialis, levitra or Viagra, some natural supplements to help with cardio nitric oxide production.

Right. I like l Citrulline, for example, is one of my go to and so forth. So you, you know, whatever by any means necessary. so that combination of proper testosterone, they need to be in good health if they're not in good general health and with good cardiovascular health, you're not going to get the blood in there, right?

You need blood in the penis, right? Yeah. And you need good vascular health, which helps keep the blood in the in the penis when you have an erection until you ejaculate.

Right. So, so with good testosterone, good erections, good relationship. If they starting you out in the game, then

there's a lot of there is, some anxiety, performance anxiety that happens.

You know, and I have mentioned this in the summit and in general that, for example, in comparison to Alzheimer's disease, where by and large people affected by Alzheimer's are older.

That's not to say you can't have early onset Alzheimer's. And I think the youngest patient I've ever seen was in her late 40s. So it's just absolutely tragic.

But I see a lot of young onset Parkinson's. And when I'm talking about the guys who are affected by young and set Parkinson's, and then some of them are single, some of them have been divorced and they're back out looking, you know, they want to have a relationship.

They want to have partners, they want to have intimacy. And it's sort of like, you know, a double whammy for them because they're young, they're single, they have Parkinson's, and they're struggling to get an erection.

So it's a, you know, it's a really big problem. And then the piece that you kind of you did allude to, you did say it, but I want to say in a slightly different way, when we talk about dopamine in the brain in general, you know, and not even related specifically to Parkinson's, it's, you know, in the frontal lobe, it's that seek out, right.

Seek pleasure, seek. It's that drive. It's that desire. Right. It's that motivation. And so we can optimize testosterone levels and even give somebody a Pde5 inhibitor.

But they're like, my brain doesn't tell me I want to have sex right or exercise or right. And and so motivation, you know, to say, okay, maybe we need to like, fake it till you make it.

I mean, like, what can you do either alone with your partner and that's individualized. Of course, my wife would say it starts with words. You know, we, you know, how do we talk to our partner?

How do we relate to our partner? You know, how do we initiate intimacy with our partner? How do we create an atmosphere? and that's different for different people.

It can get kind of racy and that's fine, you know. But it's just the point. It's it's different for different people. And so I would definitely encourage folks to first of all, let down their, you know, inhibitions or whatever and know that sex is something that, you know, we're all here as a result of.

And I would say nine out of ten people enjoy in their life and then find kind of what works for you. And there's never any judgment. Can I would say you can host very successfully the Sexual Health Summit with the way you just expressed yourself with sexuality.

So, food for thought. Well, we did, interview and I don't know the order of things, but, we got a little. Elliot. Justin, I have another gentleman that I'm really excited zoom with mystery vibe.

and actually, if it's okay, I want to take a minute. could you talk about intimacy? I mean, when I, when I'm rotated in, and I, by the way, and I went to Emory, I rotated in neuro urology out of interest and we didn't have the Pde5 inhibitors.

And so these doctors were using vacuum devices and, you know, yohimbine or whatever. just, the, the importance or the role of some of these, mechanical devices, if you will.

Yeah. So you got to exercise the penis. If you don't use it, you lose it. Now men on average get 3 to 5 erections every night. So they get an erection every day, unless they have a prostate surgery or they had some sort of procedure.

Men with PD seem to get less erections at night than they then the men without PD. So you got to exercise that. And one of the exercises to do is vacuum device A, B EB right.

You know, eight minutes a day, you know, you pump it up and you get blood in there, right? Daily. Pde5 inhibitors is one way of doing that to, you know, low dose like tadalafil five milligrams a day, the right nutrient combination.

again, things that, you know, beets, now they have beet pills, for nitric oxide again. L citrulline, I'm a big fan of, so, you know, honestly, in some men, I tell them, you know, masturbate, you know, unless it interferes with their religious beliefs.

But, you know, use it, see if you can get a firm enough erection that if you did have your partner with you, you can, And that's that. That's a test without testing it in real life.

Right. and so, yeah, you have to exercise. They have electric stim and they have shockwave therapy in some clinics that I think works very well. It's almost like shockwave therapy for kidney stones.

but they have it kind of it stimulates stem cells in the penis. That may work very well. That's great. Used to be that they that were implantable too.

I don't really see that anymore. That is where my medical school, early residency. Early? Oh, yeah. There. you mean implants.

Intimacy, Devices, and Women's Urology

Surgeons, right? Oh, yeah. They are. I could mention that. I mean, if you're really. It is a surgical procedure under anesthesia. Yeah, but it works very well.

In fact, on my podcast, you will see, by the time this is published, I have a four part series, Doctor Geo podcast on, sexual health, and most of it is on penile implants.

I'm interviewing, well, you know, leaders on penile implants. So it's a very popular procedure. Where I mentioned before we started recording, we're interviewing, assume who's has, mystery vibe and Elliot, just, yes.

And Elliot, Justin, who has firm tech. both are excellent. Excellent. I'm going to post to check that out. but Elliot was talking about the, firm tech device, which I know you have, you know, in your in your office there.

And, just aside from its ability to say, maybe help the gentleman, maintain an erection, they actually collect data on nocturnal erections because it turns out that it's a great measure of cardiovascular health.

And I imagine it's also a great measure of sort of psychogenic impotence as well. Like, hey, you're getting erections at night, but then when you're with your partner, if you're having trouble, let's let's work on that.

Let's talk about where that. You can differentiate, where the underlying causes for sure. Anything you'd like women to know? You know, in my practice in this day and age is primarily men and males.

the, I the things I know about women's health in women hormones is, from raising two daughters and my wife, on a so I see what I see. And I was like, oh, what's that about?

and is it related to hormones? But for women, I think that they are, honestly, they are, what I can say in my department at NYU is that they are specialists in urology and female urology that treat women with Parkinson's disease.

So if you have Parkinson's disease as a woman and have urinary problems, don't see a general urologist, see a specialist. And there are few. And throughout the country, and particularly in big academic centers, see a specialist in female urology that has experience and interest in, patients with Parkinson's disease.

You know, Dr. Geo, one of the things that I really want folks to get out of the whole summit, certainly the interview that we're having now is even if they maybe don't remember everything, they they didn't necessarily understand

every last detail.

And some of the pharmacology is the steroidal genic pathway. And, you know, five alpha reductase inhibitors and aromatase inhibitors and all that is that regardless that when you go into your doctor and you have Parkinson's and they talk with you about your tremor and your gait, and then there's sort of that vibe, if you will, that energy that our visit is over because here's your prescription.

Please tell your doctor that you're having this or that issue. Erectile dysfunction. Concerned about low testosterone? I'm concerned about not, peeing frequently at night and urinary frequency and incontinence.

And by golly, if they don't have the solution to help you, please know that. But it's Dr. Geo and other doctors out there that we really care. And this is very much part of Parkinson's and very much part of the human experience.

so so don't be fooled to thinking this is not important or you should not ask or tell. Yeah, well well said, well said. Absolutely. Well, Geo I was we round out our interview.

If folks do want to connect with you can you tell us what we need to do? Well thanks again, Ken, for having me. the website that where it lead to all things DrGeo.com.

So that's DrGeo.

Closing Remarks and Contact Information

com and information on podcasts and free downloads and all kinds of things. That's where you'll find me and those that, type of content. So, thank you so much are such a pleasure.

What's the name of your podcast program. "The Dr. Geo Podcast." Yeah. So that's an awesome one. Check it out. I'm assuming you're on Apple Podcasts and all other.

Apple, Spotify and YouTube. That's great. and they can see you as a patient. Should they? Yeah, sure. all the information is there, as to how to make an appointment as well, if they if they want to see me as a patient and we do telehealth as well.

So I do know I'm going to do like I'm going to be the first to promote here, but you tell me that you're going to be doing your own Summit. going to be, go live in 2025.

So The Prostate Cancer summit, will go live, November 19th for the whole week. So November 19th of 2024. All right. We're folks are, going to go right off the heels of The Parkinson's Summit.

Yeah, and The Prostate Cancer Summit. So that's. Great. That's right. Back to back. And actually perfect timing because they're going to watch this interview and they're going to sign right up.

And because it comes just a week or two later. So that's perfect. That's right. Well Dr. Geo Espinosa, thank you so much for joining us on The Parkinson's Solutions Summit.

I really, really appreciate it. You've given us such valuable information and I hope to be seeing you soon. I hope so too. Ken, thanks so much and good luck with the Summit that it's going to do well.

Really well. Thank you.