Introduction and Background

Good morning. Good morning, Doctor Drummond. How are you? I'm good. I'm so happy to be here. Oh my God, thank you so much. I am so stoked to do this interview today.

You are such an an interesting person. And, this is great. This is great. So I am going to let you introduce yourself. All right. Excellent. Well, thanks so much for having me.

First of all, it's my pleasure to be here. And I'm coming with a background of 20 plus years of experience as a clinician. My original training is in physical therapy.

I'm a licensed physical therapist. I also have a doctorate in clinical nutrition, and I also work as a nutritionist. And most importantly, I am a board certified health coach.

So that gives me a really interesting perspective on helping people elicit all kinds of healing strategies from within them that they already possess.

I've run a company called the Integrative Women's Health Institute for the last 15 years or so, and we have trained integrative practitioners, primarily in women's health and functional nutrition for the last 15 years, all over the globe.

Both digitally and in person. When we used to do that and maybe do it again someday. And today I'm coming to you with that background of functional and clinical nutrition experience, physical rehab experience, and my own experience with having Covid and long Covid.

Since for about the last 13 months. And I think finally we are starting to have enough research to piece together, a sort of model of what may be happening at the root cause level that we can talk about today.

Oh, that is absolutely so interesting. From your background and how you how you sort of transitioned into now talking about Covid from personal experience.

And I feel that a lot of times we become so much more passionate when we've experienced something. And I am really, really, really interested in finding out how you how you, other than you having Covid and having this, long haulers syndrome.

Tell me a little bit more about how you integrated this into, women's health profession. Well, one of the things I noticed fairly early on was this was impacting women, more so than men, although there are certainly tens of millions at this point, if not hundreds of millions of men in the world who also have long Covid.

The estimation is about anywhere from 10%, but probably more likely between 30 and 50% of people with any Covid infection.

Womenu2019s Health and Long COVID Risk Factors

In fact, more likely if the person has had a mild or asymptomatic infection will go on to develop long haulers syndrome or long Covid. And but as is is very common with other autoimmune conditions, chronic pain, conditions.

My background clinically is, you know, 20 plus years of supporting and treating women with chronic pelvic pain and endometrial osis. So I'm very steeped in the literature of chronic pain and chronic fatigue, which often overlap.

And long Covid is also very similar to me, CFS, which is, chronic fatigue syndrome. And so I was seeing that the people presenting with long Covid were more so than not women generally ages 35 to 55, kind of that middle aged, time frame and perimenopause causal or transitioning into menopause or the, the infection itself, significantly

impact their menstrual cycles.

For me, it literally kind of tipped me right into menopause pretty abruptly. And so I was wondering from the get go if there was some interaction with, autoimmunity and or hormonal imbalances.

However, personally, how I felt, was symptomatically was super clear to me from day one that this is a vascular condition. I literally had intense burning pain in, like I could visualize a map, you know, as a physical therapist, we have x ray vision a little bit, right?

Because you've seen you've done so many cadaver dissections and memorized so in anatomy, right. That and you know, physicians, chiropractors, nurses, we all have kind of x ray vision.

And and I was able to really feel a map of my vessels. And so when you look at all of these things layered on top of each other, my women's health background and my experience, more importantly, I think in working with chronic conditions, served me well to start to think about a model for how to unravel this and knowing that chronic conditions are very poorly managed in traditional medicine.

You know, there is no one drug, one procedure. And very often patients are especially, you know, middle aged women, quite frankly, are gaslit. You're just anxious.

This is menopause. And I'm very familiar with menopause and perimenopause. I've been teaching on that subject for a decade. And so while I knew there was an interaction, I knew it wasn't the same thing.

And so it was giving me. I think having that background helped me to see that. Here are some of the factors that are probably contributing to this. And like these other syndromes that I see all the time in my practice, I mean, CFS, fibromyalgia, endometriosis, chronic pelvic pain, any kind of chronic fatigue, Epstein-Barr virus, you know, other post-viral syndromes.

We have to look at this through a very broad lens, because it's not like one thing that we're in and develop, you know, a single drug treatment for, if you will.

Right? Right. Right, right. Yeah. That is, that was really interesting. Talking about, I think from what I heard, Primo menopausal woman from might be one of the, I was at risk factors.

But but kind of maybe, predisposed. So in your research and in your findings, what would you say are some of your risk factors for long Covid? So there are a variety of papers that have just started coming out on this.

And there was some patient led survey research that came out probably like within the last three months. And one of the papers is brand new. That just came out in the last week.

So the Patient Love survey research essentially showed that people who were seeking treatment, who were still struggling with long Covid, you know, a year plus, or at least, you know, eight, nine months post Covid, primarily female, primarily in the age range, I believe it was 35 to 50 5 or 60, mostly athletic, previously very healthy, very driven, very athletic.

High levels of fitness or at least moderate levels of fitness was highly correlated. So the kind of healthier you were going in, the higher you risk, which is really interesting because that's very different from the picture with, acute Covid exacerbation, which tends to be men, metabolic syndrome.

You know, people that had more metabolic risk factors are at higher risk for hospitalization and death, but for a long haul, active women. And this makes sense when you think about the Ace2 receptor, is the entry point for Covid infection.

And people who are more fit have higher levels of Ace2 and Ace2 enzyme, which is generally beneficial. But then the Covid comes in kind of it there, you know, and shuts down that enzyme, which is a potential cause, if you will,

of why the symptoms are so varied, so athletic.

And then also having had a history of to PE or allergies, you know, which we think of in kind of functional nutrition as a more autoimmune picture, topic fixed, picture, you know, people with things like eczema.

And then in some of the research that was just recently published, also seeing risk factors for people that have previous, infection with Epstein-Barr, which is interesting because that's almost everyone.

But for like a certain percentage of the population, the Epstein-Barr virus has been kind of reactivated by the Covid infection. There are clearer and clearer autoimmune markers.

I noticed actually, on the CDC website just this week, they've posted autoimmune markers to be looking at for people with long Covid and women have a different autoimmune picture, if you will, than men.

So in both cases, Covid can activate auto antibodies. But in men they they it activates a wider array of autoantibodies, but not as intensely with women it's a smaller, number of auto antibodies, but higher.

And one thing I think about with this.

Common Long COVID Symptoms

So these are ggc PR, one is that the, the coupled the I'm, I'm blanking on the term of that, but it's a, coupled receptor that's similar to the histamine receptor or that you see these autoantibodies in the small studies we have some of these studies are, you know, only ten people.

We can only generalize it so far with the for a syndrome that's affecting, you know, hundreds of millions of people. Right. But you are seeing autoantibodies to some of these receptors that align very well with, this diverse symptom picture.

We'll talk about symptoms in a minute. But so auto so history of autoimmune issues, history of Epstein-Barr virus asthma history just came out and diabetes history.

So there may be some interplay with that. Interestingly when. So I've had never any metabolic syndrome types of issues. But looking into my genetics there are some metabolic risk factors.

And from a gut microbiome standpoint, my anchor Mancilla, which is important for blood sugar stability was very low. So there may be an interaction between metabolic pre, you know, metabolic predisposition even if someone doesn't actually express diabetes or any level of metabolic syndrome.

That may be an issue. And then as I said, female, middle aged, active and athletic. Right, right. That is that is so interesting because we we tell our patients, you know, you got to move.

You got our exercise. And, it's really in my office like preach diet and exercise, diet and exercise and and sleep. Of course now PMF which, which now the studies are showing that maybe sometimes just rest might be better as opposed to, the, the athletes.

So, we would you kind of touched a little bit, on symptoms. So tell me what what are some of the common symptoms of long Covid? So I do want to answer that.

Let me just quickly say about exercise, I am still very much a proponent of exercise, but I think we have to become a bit more nuanced about looking helping women and all of our patients see when their level of exercise is exacerbating stress and when it is kind of building resilience sense.

And that's that's a complicated conversation that could probably take us a whole other interview. But I don't want to demonize exercise because there's still huge benefits to exercise, by and large.

But when it comes and especially for prevention of acute Covid of death from Covid, again, just resilience building muscle is very valuable for long term longevity and kind of women's health into the, you know, older years.

But I think we have to start being a bit more nuanced about our recommendations with exercise and look at it in concert with everything else. Women of often this kind of middle age are doing right.

Like, what's their stress level? Is it here? And then we're just piling on. Exercise is like even more stressful. Or, you know, can we do it in a way that's going to be more nourishing?

So and then on that note, for people who actually have long Covid, exercise is absolutely not a treatment. If anything, it will make the situation worse.

So we do not want to exercise and we do want to do activity. And there we do want to consider pacing and getting people back to movement right. But progressive exercise, and the way that we would think of from a rehab standpoint, like recovering from an orthopedic injury or even a stroke, is absolutely contraindicated in people with long Covid.

It can make things significantly worse. That is that that that really is an eye opener. Awesome. Yeah. So, what are some of the what are the most common symptoms of long Covid that you have found in your research?

And really personally as well? Well, it's there are hundreds of symptoms of long Covid, which is why it's such an interesting thing to dig into. What's the root cause of all of that? Right, right.

Most common is fatigue, which is really interesting because there is that, you know, interaction with Epstein-Barr virus. So and when I say fatigue, I don't mean sleeping sleepy, I mean like crushing.

You can't get out of bed kind of fatigue. It's exhausting to breathe fatigue. And people are trying to live through it because, you know, there are various levels of this fatigue.

And it's also neurologic and cognitive fatigue. So difficulty being on screens for a long time, difficulty holding conversations. And like I said, there's a spectrum of this.

So there are a lot of people who are pretty functional, but they're not at all where they used to be. And I think that's an important thing to be aware of. So.

So fatigue is the most common. Headaches, pain, vascular pain, joint pain, muscular pain. When you look at, you know, sections of skeletal muscle under the microscope for people that have of people that have long Covid, they look like they are in heart failure.

So the muscle themselves are damaged. Also there are there is organ damage. So this doesn't apply to everyone. And a lot of people, the organs sort of recover, but they still have this, issue of hypoxia.

And we can talk about what some of the causes of that might be.

Possible Root Causes and Treatment Approaches

But so there are people who are presenting with things like pericarditis, myocarditis, you know, lung issues, clotting, blood clots is a huge as a motor is a very common, manifestation.

So pain, fatigue, insomnia, you know, depression, as you can imagine, because people can't work or live or, you know, cook a meal or take a shower. I mean, I know many, many, many people in the Long-Covid community who a year, you know, three months, six months, a year or two years later from some of the people who are originally affected.

In March of 2020, who were vibrant, athletic, 30s, 40 year old people who are wheelchair bound at this point, who

are using shower chairs, you know, and they're doing their best.

I mean, they're trying to live their lives, but it's it's very debilitating. So the visual changes are, sometimes an issue and then a very common manifestation is some degree of disorder.

And, yeah. So again, for different people this presents differently. But many people do have clear diagnosable tilt table pots, postural orthostatic hypotension.

Other people have and this is something I had, REM sleep apnea. So, you know, something that's sort of dis autonomic from that, disorder noma related to hot flashes.

And then a lot of people are sort of functioning, you know, they don't have clear orthostatic hypotension, but they do have kind of wonky blood pressures, especially at the capillary exchange level, where they might be able to do some movement, do some exercise, but they really can't do it a lot.

And upright. So we have to retrain kind of horizontally in the same way that you would do with someone who has just autonomia, this, this, this has got to be one of the biggest eye openers.

I think, with, with Covid being so new, and, you know, kind of just hit the whole world, by some kind of got the storm, to have people like you who took the time to, to to do the research and the background, to come up with these, but these little tidbits, I guess, there's interestingly, Doctor Polycom, there is, an article where he talked about how NPH can actually help with some of the symptoms, with the cell regeneration and, insomnia, and, inflammation and circulation.

So, for people who are listening to this, that would actually be a really good, place to get some add on on on how pmfs is able to be incorporated to help with this kind of healing.

Yeah. What would you say is the root cause of long Covid? I, I know you touched on a few different factors, but, what what would you say would be. The answer is we don't know yet.

I have a few ideas of probable root causes based on literature that's currently been published and just, you know, seeing probably 20 different specialists in this field, like myself.

Absolutely. There seems to be some degree of micro clotting or aging monocytes. So if you look at the the work of Doctor Patterson and and Bruce Patterson and his lab doctor Rissa Pretorius and her lab, they're different.

But in both cases, the kind of underlying theory is that there are these micro clots or essentially aging monocytes that have tried to clean up the proteins of Covid, and gotten these like, it's like sticky and gumming up the works of the vascular system at the capillary gas exchange level and or at the just vessels in general.

I think that is true. Now, I also think that that may or may not be the the root root in the sense that, you know, we don't have papers really get out of those labs looking at clinical trials of treatment and how long they last in people.

Because, you know, we are seeing that sometimes people go and they kind of clean up those clots, whether it's through an anticoagulation protocol or through a freezes or through an antiviral protocol, clean up that issue.

And I've had elevated fibrinogen, which, we've been steadily treating with more holistic anticoagulation, and that's working. Well. My fibrinogen is normal now.

But that capillary gas exchange problem, why why do we have either these clots or these little guys coming up? You know, immune particles, if you will.

What's driving that is the question. And it's probably and again, I'm not sure about this because it could it could just be a shift in the immune. Like the immune system gets sort of stuck.

So I think that's one theory. The immune system is sort of stuck in an aberrant response. And this may relate to PMS. I have not personally use PMF, and I don't know enough about it to really, talk about it here smartly.

But I would say that vagus nerve toning is essential. So again, and from my experience with chronic pain and chronic fatigue, we do see that even in, chronic fatigue syndrome, that there are lower levels of nitric oxide in the blood.

If you take the blood of people from my, me CFS and you put it in other people, it changes the level of nitric oxide, which is fascinating. So looking at how the nervous system can sort of reset, if you will, the immune response, I think is really an interesting thing to explore.

I think that's essential also because everyone seems to have some degree of dis autonomia with long Covid. So that's potential root cause number one. Potential cause number two is viral reservoirs.

So studies have been done looking at patients up to 230 days post-infection. And they still find reservoirs of long of Covid in the brain, in the gut, in the eye, you know, all over the body.

So kind of like Epstein-Barr where it can hide and be reactivated. That's an issue. So that and then if both Covid can both hide and reactivate other viruses and you've got this sort of chronic infection situation going on, and then finally you the autoimmune component.

So what has been triggered in the immune system that's now kind of creating a new, if you will, autoimmune disease or a picture presentation. So I think those three are things to really look at.

And I also think though, that cleaning up the the micro clotting, you know, healing the immune system from an inflammation standpoint is all really important to kind of peeling off the onion, if you will.

Right? Right. And PMF actually does a lot of, what are some, some of the symptoms you and long term chronic, aspects, PMS, it helps with circulation. It does, cellular regeneration because it works on a cellular level.

So some of those, those icky kind of clotting from sticky cells. Description. I think PMF might be, something that could definitely be explored. And, and, and I think that just that article on Doctor Pollock's website, kind of almost marries a lot of what you were saying.

So that might be something, to, to really, take a look at because because I think just, just that one little aspect you would know a lot about PMF. Pretty great.

Yeah.

Personal Recovery Journey

Because you know, enough about the background of Covid and the symptoms and, possible causes. You almost seem like scientifically that if you get rid of such things and you can fix such things, then maybe this might be a solution.

And, PMF, which is just a little add on to kind of, get, get, get you going to, to that end point. Yeah. I mean, maybe so. And I think it's going to take a multi factor approach in in most cases.

I also think that there is a huge range of kind of what people are dealing with. You know, this is literally affecting hundreds of millions of people globally.

And so each of those has a different, you know, relationship with Covid from, you know, how many people in their family have passed away from Covid. You know, there's a trauma response definitely tied into this.

People's underlying conditions, people's previous condition. You know, how big of a shock was it for them to go

from being highly active to being really disabled so quickly?

You know, and so the, the range of responses is so varied that I think we're definitely going to have to take a personalized approach, because for some people, it will be simpler to unravel.

And for some people it will be a lot more complex. Right? Right. Absolutely. What all of all of the pieces that you have and you have compiled and from your personal experience, patient population, what what is your approach to helping people recover from long Covid?

So it really is kind of that, peeling of the onion. So first, looking at the nervous system and doing a lot of things like breath work and, vagus nerve toning, activation of the parasympathetic through somatic somatic exercises through, you know, I tried vagus nerve stimulation could be helpful.

There is a new paper out on that. It may be a little aggressive for some people, but we can always start with loud singing and breathwork work and yoga and, you know, qigong and tai chi and there's many strategies, nature walks, intermittent fasting.

I mean, I could list 100 ways to, to work on the, the autonomic nervous system, then inflammation and immune support, to both improve barrier function to reduce autoantibody challenges, lowering of inflammation.

Of course, movement. But within that pacing window, so that people are beginning to feel more functional, unwind some of the depression that can be from being so incapacitated, but being mindful of the envelope of kind of safety of of activity, certainly referrals and follow up for any signs of more acute organ damage.

This is where I think our conventional medical system does a great job. I mean, I had a clear case of pericarditis. It was treated medically that completely recovered, resolved within three months.

So and then so we looked at the nervous system, the immune system, gut microbiome. There's more and more research there as well about the dysregulation of the gut microbiome and then dealing with detox, and co-infections.

So how can we help the body to kind of clean up any activated infections or this more chronic presentation of Covid, where it tends to be hiding these viral reservoirs?

So it's you talked about the pericarditis. Tell tell us a little bit about your personal experience with long Covid and some of the things that you tried personally, that helped you.

So when I first had Covid, I had a mild case, and, oh, you know, I was like, cough one day of fever, a little bit of fatigue. And then one morning I just woke up and literally couldn't breathe.

My heart rate was 150 at rest. It was really intense. Around day 7 or 8. So I was prescribed some steroids and which is interesting. We know now that that steroids can reactivate Epstein-Barr.

Also, there is some indication of an overlap between Covid and Aspergillus or mycotoxins, mold toxicity, which is also interesting because I was isolated in the winter and this all happened to me like Christmas of 2020, in my room, because, you know, we were trying not to spread it, which was great.

We didn't, only two of us in my family got Covid, and I was running a humidifier just because I felt better. It felt good, but I when I kind of opened that room up after my 14 day isolation, I realized that that triggered some old growth in, like, the, like the, the shades on a big window in my room.

We clean that off. It's fine. Like we don't have a mold problem in the house now. But acutely at the same time that I had Covid, I was exposed to mold.

And there is some data that shows that that can make the acute Covid cases worse. So I've been doing some mold

detoxification in my own body and house, just making sure everything is super clean of mold as much as possible, or really more importantly, that I'm tolerant of mold as much as possible because I don't like to scare the nervous system of anything.

I think the nervous system should be able to bathe in mold or gluten or whatever it is without fear. So. But for a while, sometimes we have to take the pressure off and let the nervous system heal.

So we did that. So I've done that. I'm doing that. So I took the steroids, I went to the hospital and I was given IV fluids. I did not have any clots.

Thank goodness my lungs were clear. And basically I was sent, to just breathe the best I could, which I kept doing, didn't go away. I had a pretty intense chest pain, a lot of deep fatigue.

So I was sent to a cardiologist pretty quickly. The my Western medical team did a great job there, and I was treated for pericarditis with high dose ibuprofen and colchicine.

And I actually also use CBD oil, which they recommended and agreed with to kind of steadily step that down. So in three months, my heart was healed from kind of an organ standpoint.

But I still struggled with fatigue. I couldn't walk more than, you know, 500ft with real effort. I had a lot of vascular pain, a lot of cognitive fatigue, but mostly it was cardiovascular presentation for me.

Pulmonary. I wake up in the middle of the night with hot flashes and breathlessness and kind of dropped. Pulse is, I mean, up until very recently, like I'm talking within a few weeks or so, my pulse ox at night would go into the 80s every night.

So still struggling with that. Not because there was a lung issue per se, but a vascular issue of the lungs. And so I slowly increased activity. But I, from a nutrition standpoint, did a ton of polyphenol, you know, everything to increase nitric oxide beats last year, you know, resveratrol for the heart, curcumin.

Lots. Like I said, lots and lots of beet powder. Blueberries, no grains, no sugar, no alcohol, no caffeine. You know, just bathed my selves in vegetables, soups and smoothies and stuff for months and months and months.

And a lot of sleep as much as I could, although a bit broken because of the suffocation at night, I had some sleep studies. I was always sort of borderline for sleep apnea.

I was I was eventually prescribed, CPAp, which I as soon as I bought my O2 sats improved at night. So I've kind of kept that on the shelf for, for now.

What else was I doing in that early days? Oh, and then in April and May of 2021, so about five months after my acute infection, I had my, RNA vaccines, which immediately improved my heart immediately, like within a week, and got my resting heart rate back to normal at night into the like lower 60s where it had been, you know, in the 70s for a long time.

And my heart rate variable began to improved. And then the second vaccine. So obviously there were two and the second one about 4 or 5 days later after that vaccine, all of my vascular pain just disappeared.

So it was fascinating, which again leads some credence to this sort of viral reservoir theory, if you will. And I was still doing a lot of, you know, quercetin and zinc and other nutrients, vitamin D, my vitamin D levels were fantastic.

And pre-COVID, they dropped significantly during Covid but have since recovered. And then just keeping up with those sorts of things. I also tried, I've done ivermectin and other antivirals.

Ivermectin was sort of a temporary mild help, which was still nice. I think it's a helpful thing for, again, potentially antiviral reservoirs. I wasn't able to tolerate some of the antiviral, supplements.

So that has is maybe helpful. I don't think of it as a silver bullet, but I do think it does move the ball forward for sure. I think any there are lots of antivirals that could set that, and anti-inflammatories because as I said, ibuprofen was really helpful for me.

Like the more powerful, the anti-inflammatory, the better. So I've been doing that in a supplemental form. You know, like I said, curcumin, fish oil, SPM mediators, you know, just throwing the kitchen sink at it from that standpoint.

And then finally, most recently. So I've also more recently in the last few months, worked with a wonderful doctor, Evan Hirsch, who is really skilled in co-infections and mycotoxins to open the detox pathways.

That was tricky at first. It made me worse. Before it made me better. I had to really slow down the detox. I couldn't tolerate, a lot of that work at first, which, you know, so we slowed it way down, got patient.

And that was that's been, I think, helpful. But it's that's a process. You know, I have that history of Epstein-Barr reactivation. Who knows about the micro toxins.

There may be other co-infections that I wasn't aware of. So I think unraveling the co-infections is a really important piece but a little bit challenging to do.

You have to do that in collaboration with your practitioners for sure. All of this, you should do in collaboration with, nutritionist, physician, people who are really skilled in this.

And then more recently, I was in a trial of a drug called in Spirit Hall, which is, essentially an inhaled form of a number of amino acids and, and acetylcysteine and glucose ion, which, of course, I've been taking buckets of orally and via IV for months.

And now I've took it in an inhaled form, and unfortunately, I was allergic to it because I am allergic to solve the drugs. But I was able to tolerate it for about a week.

And it really has helped with the oxygen, you know, saturation improvement. So I think all of that adds up to lots. And I've also more recently done a lot of trauma therapy and, you know, really diving into the vagus nerve and parasympathetic activation.

So I've done what I'm telling you here. I think it's an it's a layered approach that led by the nervous system, supported with anti-inflammatory, antiviral, and gut microbiome balancing.

Some people have a lot more gut symptoms than I have. It's not really something I've had, but I did take I have taken NCA and other things to get my gut microbiome really optimized.

And so and same thing when I was doing the detox, you know, things like binders, even chia seeds have been really helpful, for getting the gut moving.

Again, lots of antihistamine supplements and support. From that standpoint, I really can't still can't quite tolerate drinking alcohol.

Endometriosis and Holistic Care

So that's all right. I'm willing to give that up. It's not something I was doing a lot before, so it's okay. And maybe one day I'll have a glass of champagne here or there.

So it really has been that multi-pronged approach, and I do feel like it's been really successful. But I also think we have more work to do because there are a lot of quote unquote root causes.

And this, you know, takes a concerted effort over a long period of time with skilled support from people like myself

and functional nutrition from from physicians, both to rule out more severe organ pathology and treat that when necessary, and to dig into these more functional medicine types of approaches.

This this was very interesting. And I like the onion, peel, the peel the layers because I think a lot of things in life kind of if we can approach it as layers as opposed to trying to hit everything head on and you're sort of, a good example of how if you break things down, it becomes a lot easier and you really are sort of a living, testimonial of, of, of Covid and long Covid and, the different aspect of how you can you can fix the, I guess, get yourself back to normal, to where one day you're going to celebrate with a glass of champagne.

Absolutely. Yes. And be normal again. You you what? I would say that he mf. And maybe after this we can have a conversation. Because I think having PMF as part of your daily routine, you would see such a tremendous difference because the supplements that you're taking and all of the other stuff that you're doing, PMF actually makes all of that work so much better.

So some of this, this might be something, I will talk to you offline. And as a side note, you are such a package and you're so interesting. And we talked about Covid and long Covid, this entire conversation.

But when I read your bio, I looked up this book that you wrote, Outsmart Endometriosis. And as a female practitioner, I'm so interested in a little bit of, of that.

I know it's sort of off subject, but you are such a package deal, and I, I really want to take this opportunity to, to to hear a little bit more about this book and how you came about the book and some of some of your little pearls of wisdom.

Well, I've been treating people with endometriosis essentially in my whole career, so roughly 20 plus years and it's that's also been a journey of really learning over time.

What are some of the root causes? How can we unwind it? How can we collaborate with really skilled at endometriosis, excision, surgeons and pelvic physical therapists to help to, you know, rewire the nervous system to, optimize parasympathetic activation to understand what some of the pain triggers are.

And I, we use a lot of heart rate variability in our practice to help with that. We use, you know, short term therapeutic diets. And a lot of it is very similar to kind of the what I just mapped out with long Covid.

And I think how I've been able to apply this in my own life without knowing anything, because Long-Covid is so brand new, especially when I first had Covid, you know, I was I was second wave, if you will.

It was relatively early in the in the process. At the end of 2020. So I feel like with endometriosis and other chronic pelvic pain conditions, first of all, I have mapped out this whole approach in my book, Outsmart Endometriosis, which any of your audience is free is welcome to get a free copy of at Outsmart and Dotcom.

And I'm actually working on the second edition right now. So hopefully that'll be out in a couple months. But it's really the same. Think about how the nervous system gets rocked by everything from medical gaslighting to the trauma of having pelvic and period pain that's ignored by your school nurses.

And you're told to show up for soccer practice anyway. And, you know, these are very driven women whose lives get derailed by various significant pain conditions.

And then oftentimes they're given no treatment except for things like birth control or hysterectomy, neither of which is really very effective as a long term strategy.

One of which, hysterectomy, doesn't even treat this at all because the deafened by definition endometriosis is outside of the, uterus. Now there is a dunamis which is in the uterine wall.

But same thing. Like we can't just take it out. It doesn't just fix it. So we really come from an anti-inflammatory

approach, from a autoimmune supportive approach.

So optimizing gut microbiome, gut barrier function, digestive function. And that is so intricately related with the nervous system because if people are afraid of food or they're rushing through eating or, you know, can't tolerate things because they have Sibo or something to that effect, and often it's not just because of what they're eating, it's because of growths of endometriosis or adhesions or scar tissue limiting gut motility or even histamine, elevation or histamine intolerance, if you will, which is just excessive histamine limiting that, nice digestive flow.

It could also be from the nervous system. So we really take the same approach of nervous system immune system, digestive system and musculoskeletal system because I carry my little pelvis everywhere.

So you've got all these muscles of the pelvic floor that if you can imagine someone said intense pelvic pain since they were about somewhere between 8 and 20.

Right. You know, so when they're first period probably or even before in that neighborhood, you know, if I think about it, if a tree fell on your shoulder and you had a big gash here and there was no treatment for.

But like, I don't know, birth control, then you'd walk around in kind of a bit of tension, like just waiting for the next treat of all. And so while it's not a muscular injury per se, this underlying disease process and the pain cycle triggers myofascial QL and neuromuscular and musculoskeletal problems as well, in the same way as like, you know, if I walked around like this for ten years, I'd have a lot of headaches and arm pain and shoulder pain.

And yeah, you could throw tons of anti-inflammatories, whether it's supplements or ibuprofen at it. But until you understand where that pain is coming from, how to change how the brain interprets it, you know, potentially do excision surgery, pelvic excision surgery to remove the nail from the foot, if you will.

It's hard to unwind the secondary sequela. And, you know, just like long Covid, while the infection may or may not be gone. So we do want to still think about like, do we need to get rid of infections, chronic infections.

There's the follow up. There's how the immune response the immune system responds, how much inflammation happens, you know, underlying traumas that are associated with it and immune changes that are associated with it.

We see the same kinds of things in endometriosis. That was, that was a much needed conversations. And, I think, a lot of my patients would, would actually take advantage of the book.

What was the website again? It's just called out smart and dotcom and.com. But thank you so much, Doctor Drummond, for, for doing this interview and the enlightenment that came with it.

And you, you are such a miracle yourself. But with everything that you've been through and, and and having this, time that you can reflect and be able to help so many people.

So thank you so much. And, and I will chat offline. Thank you. Well, thank you so much for having me. Thanks very much.