Hyperbaric Medicine: Get Rid Of Your Chronic Fatigue Induced By Long Haul Post Covid Transcript

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Introduction and Dr. Andersonu2019s Background

– Welcome to this episode of the Long Haul and Chronic Fatigue Syndrome Summit. I am so excited to have with me today. Dr. Paul Anderson he's a mentor and colleague of mine, he has a significant influence on the way that functional and naturopathic medicine is practiced today.

He is the godfather of modern naturopathic medicine. So we're very blessed to hear from him today. Welcome Dr. Anderson, – Thank you so much. – Thank you.

I'll have you introduced yourself to our audience. – Alright, well yeah, I haven't been called Godfather in a long time. So my name is Dr. Paul Anderson, I'm a naturopathic physician and currently I live in the northwest and I have practiced now for well a long time and I mostly nowadays have a couple of areas that my practice and work occupy.

I write for a lot of publications, I write books for the public about integrative and naturopathic medicine. I do a lot of teaching of physicians and other healthcare providers for continuing education and then I do have a practice that I still maintain which unfortunately is closed for new patients.

But during covid as a bonus to the practice, I picked up a large amount of covid patients both in the hospital for consults and then just acute covid.

And now long covid with some early in the covid epidemic pandemic, I was asked to do some training for physicians around the world around intravenous vitamin C. Because they were starting to do that in china with some positive effect. Since then there have been other randomized controlled trials showing that you know early use is very good.

And then I also published a hospital protocol for that in case the hospital did want to use it. And we have had it used some some in the past have a past mostly doing writing and clinical work but also some clinical research that was funded by the National Institute of Health for Integrative Oncology Research.

So that's the short version. – And this is why you're the godfather of modern naturopathic medicine. Thank you for everything that you do for our profession truly.

So let's just dive right in to this interview. Tell us about this. Why is it that the severity of acute covid is not a predictive factor. – Yeah I've been following this obviously because of a lot of reasons but just out of curiosity because there's there's an effect that you see in research and reporting that you have something pretty much brand new like SARS COv two and we have data on its relative viruses but we don't have any data on that.

So then there's this progression of information so it can look one way looking forward and very different. Looking back. Well with long covid it's it's been like that.

Why Acute COVID Severity Doesnu2019t Predict Long COVID

We started to get reports of that a fairly long time ago now it started being written about. And it earlier the data showed that it certainly if you were hospitalized and you you had a bad hospitalization which normally if you were hospitalized, you were pretty sick, you had a much higher propensity for post covid. And I think the important shift in the data is not so much that's not true because that is still true.

If you had to be hospitalized with high grade, you're much more likely. But now that we see so many more people who maybe had, you know, a very low symptomatic covid experience.

And in some reports, up to 50% of people like that get, you know, have long covid issues. So it's still evolving. We really don't know what the percentages are etcetera, but it's it's a big problem. And I think that if you get to the very base of why would this be and there's been a frustration for people looking at covid since the beginning is it's so heterogeneous. It's so you can have a whole family get it and one of them gets extremely ill. Others don't hardly have any problems.

And you know, so there's something in the middle. And so it's very frustrating to have a disorder like that because it's it's quite random, seemingly. I think we get to long Covid or post Covid syndrome, what we're really seeing is what what people like you and I have seen for a long time with other chronic illnesses. But Covid because of the way it affects the immune system, which is a little bit unique. It's not unique in the world, but it's unique for what is available to humans right now, because of what it does. The immune system.

I started to talk to patients and say it's the great unmask er and so you can think that you're healthy and you could come out the other side and have long covid symptoms and there's two main reasons for that. One is there are a lot of health issues that we all carry that are sub threshold. So we don't notice them.

Our our labs might even look okay and all of that. But as soon as we get stressed enough, it basically opens the door to those things and they can be many, many areas the other is and there's actually research on this now that having the covid infection can be one event for your immune system. And so you might feel like, well, the covid was was like a cold or it wasn't very bad at all or whatever, that's limited to your initial response to covid your symptoms that you had.

It then can open you up to opportunistic things in our environment that can sidetrack our immunity that can add in infections that didn't used to be there all number of things. And now there's enough research about um the uh the immuno biology of Covid to show that it actually can do both of those things.

Open old problems that you maybe didn't know you had or open you up to new problems that were just really easy to trigger. So I think that that's why it's so random because none of us know exactly what's going on beneath the surface.

And also, like I say, you could have a relatively good, you know, five days to two weeks of Covid with a respiratory like illness get better. But that's just the key that turns on that immune activity and gives you new things.

– That makes a lot of sense. And certainly we've seen this with other infections like chronic borne diseases, chronic line for our audience who might not know what that necessarily means.

But it comes as no surprise to us then that this is happening with another infection. So yeah, so increasing their susceptibility to other infections that they may be exposed to or awakening dormant infections that they may have already had, that their immune system was able to keep in check.

Right, okay. So now tell, tell us what sets the stage for susceptibility of a person to long covid. – Well, I think that if we accept the idea, that's very logical that if you were at a hospital hospitalized level, you were sick enough, probably things went very bad and you, you know, you're more likely have long covid everybody else.

And I would say the hospitalized folks too, they're just sort of a different case. Everybody else I've seen with long Covid has sort of a collage of things that seem to set the stage one is. And I want to caveat what I'm about to say by saying this probably doesn't apply to everyone.

Which also makes it very difficult because it's very individualized. But the first thing that I've seen is um in ineffective or inappropriate or under treatment when you did have the covid acutely in there's a group that I we monitor covid cases and it's very anecdotal but it's in the thousands and so we're monitoring a lot of them. And if we look at people which is about 1000 patients at this point who had regardless of their presentation usually they were sick enough to see the doctor but they had fairly aggressive treatment during there covid experience. It's under five people out of 1000 who'd ever develop long covid. So that's you know maybe not statistically significant. But it's enough of an anecdote that probably it should be looked at. There's also some data that just came out

about you know early treatment in obviously not in the U.

S. But in other another country. And it would it loves population, you know prevention data. And it it basically showed that there was you know in in well over 50,000 and more than 100,000 people. There was about a 12% difference just in you know early prevention and doing things early on. So that's one thing now the problem people always will see with that part of the issue is you can't go back in time and retreat yourself while you have acute covid. But if you do get covid, you know, consider working with someone to get some, you know, well rounded treatment. The next thing which I have seen correlate to Long Covid is this pattern we see with patients, which we do see with other infections usually.

But it's, it's very interesting with Covid and that's what we used to call it. Double worsening. Where they have their initial, maybe the fever, cough, sore throat, you know, whatever their symptoms are, they test, it's positive and initially the 1st 2345 days, you know, are kind of a bad Vira Mia, you feel flu like etcetera.

And then they start to get better if they continue to get better. That's a pattern less associated in my experience with long covid if they go and they're getting better and then all of a sudden their symptoms come back with a vengeance.

That second sort of increase in symptoms is rarely from the covid.

Who Is Susceptible to Long COVID

It's because the covid allowed your immune system then to start to interact with other, probably infections that you already had in your body that were very minimalized and now you're dealing with other infections and and probably other things, a lot of there's a lot of toxicants that gets stirred up and, you know, other things that you can become more sensitive to those folks if they have that sort of second wave because you've, you've literally turned on all this other trouble.

Those folks, if not aggressively treated, there are much more likely in my experience to, you know, to go on to have some sort of long covid experience.

And so, you know, just on the while, I'm making caveats about early treatment and everything. I tend to be a little more aggressive with people early on and it's really paid off. But I've gotten a lot of flak from, you know, other healthcare providers that, well, that's just overkill or whatever.

But certainly what I would say is if you sort of slow pitch it for the beginning few days and then they have this second wave, you really want somebody to be aggressive with your treatment there because it's probably everything on top of covid.

It's not just covid. So then the next thing would be, okay, let's say that was a year ago and I don't, I don't have Covid anymore, but I'm still feeling sick.

The changes that go on in the body and now we, you know, we just keep getting, I mean, one silver lining with Covid is of course there's fast tracks for publishing just about anything about Covid, not, not everything, but just about anything. And so that's happening.

So we're seeing are these patterns that go on that really are very, very much like our tick borne illness, you know, lime complex patients as well and that is this combination of hormonal dis regulation coupled with latent infections or new infections that come up coupled with a lowered sensitivity to toxicants in your environment, which can decrease your immunity like mycotoxins etcetera coupled with and this is not brand new but newer data that's sort of filtering in a severe derangement in your digestive tract microbiome which really affects your immunity globally, etcetera and then a host of other things that can go on.

But if you consider that you have this underlying immune, I tell patients like a fire that's burning, that's just you know, the embers are glowing but it won't go out.

That's what Covid kind of starts and then that allows these other things to become imbalanced. So if you take anybody and and you know, wave a wand over them and mess there, you know, hormonal balance up and uh turn on a couple of old latent infections or a couple of new ones and make them a little more sensitive to toxicants and then really deranged their digestive track, you know immune function and all the other goodies that go with that and then you know, a number of other things uh they would have a chronic illness immediately.

So and what's happening in the general, you know, larger medical world is, you know, the people who do write about it there's a couple of things that go on, but mostly they liken it to chronic fatigue syndrome because it's another, you know, multifactorial problem that there's not one medical answer to.

And, you know, there's a lot of crossovers. There's also a lot of patient gaslighting from their doctors and stuff. The other thing that's of interest, I think, is there's a couple of large scale sort of reviews that have been written about Long covid and one that really got the attention in the United States of doctors because it fed into probably their underlying biases was, well, we looked at all of these labs and these people as long Covid and there was nothing statistically significant that was abnormal about their labs.

And so, you know, the problem with long Covid maybe somewhere, but it's probably that what they're inferring is it's not biological. UAnd then there's newer data that says, well, if you're, if you're in the United States, you're up to 10 times more likely to report Long Covid than other countries. And, you know, that's probably a societal thing, I don't know. So I think that one of the problems is if you're seeing a healthcare provider and they're not used to dealing with multi system, you know, chronic illness they're in no way going to be able to do anything other than maybe refer you to specialists, which is good if you, you know, if you think that you have a heart problem or a kidney problem or something from covid, you should find out about that. But those referrals are for safety and monitoring. They're not going to help you other than some symptomatic medication. So really if you think about it, then, you know, that paper comes out showing while there was no labs that we and they looked at a lot of labs, certainly not everything.

You know, well, there's no labs that are abnormal um that can lead doctors to sort of say, well, you know, we don't know, you know, and if if your heart and your lungs and your kidneys etcetera are good, you know, maybe we should give you an antidepressant or something kind of like all our other chronic illness patients.

So I think if you're experiencing that as a patient, you need to take a step back and and find a practitioner that's already doing work with chronic illness.

– That makes a lot of sense. We've been treating a lot of long haul actually through Dr. Bruce Patterson's group. We've had people that come in and give them just, you know, some some basics part of the standard protocol and a lot of them, it's just not working, you know, and and so then what we're doing is we're taking a step back and we're evaluating them the way we would people who have um chronic Lyme disease or chronic old issues or chronic parasite issues chronic environmental toxins.

Well, guess what? It's usually all of these things combined. And so that's what we're finding that people with long long covid when standard treatments not working for them. And of course we're referring to the cardiologist and the hematologist that whatever ologists that's needed for the current symptoms at hand to make sure everybody's safe.

But inevitably, you know, it all goes back to, well, what else was dormant and woken up or what what might do? – And I think that, you know, the pattern you describe as what most of us are seeing.

And that's, you know, if you do standard supportive care just for any post viral, you know, patient, they're going to react a certain way and usually get better in post Covid. There's a large slice of the population where it's good to do that to see if they're going to resolve these year.

But there's a large slice that don't resolve. And then if you don't take a step back and look at all of those other things. Unfortunately those are the people where it's six months, a year, year and a half, two years and their bodies still can't get back on track.

So yeah, I think that's another really important pattern to watch for, – Right. And I think another interesting thing is that people and their doctors even are not necessarily correlating it with long Covid or with Covid. You know, it might be 34 months later after the infection that the person is experiencing a downturn in their health or, or new symptoms and they're not correlating it. So I think that's something I'd love you to speak to. – Yeah, I think one of the things that creates that situation is, you know, you expect not to feel great if you have, you know, the flu or covid or any other thing like that.

And so you expect some, you know, well, I'm gonna be tired for a little while and, you know, my, you know, my exercise tolerance may drop and other stuff, it's just like, you know, anybody's had a bad flu, they kind of remember that.

So then those other symptoms kind of get just pushed off to, well, you know, I was sick and, you know, and that's probably what was going on. And, you know, humans have a really great capacity for putting up with quite a lot of, you know, things not going well. And uh, and our other great capacity is, is, you know, putting ourselves on and, you know, uh, not looking at things that maybe, you know, if we, if we looked at them a little more, we'd get some more help.

So certainly, you know, and, and the, the biggest thing I think if you're, you know, especially let's say this hasn't happened to you and now you're curious about you and your family and you want to watch for signs if a person is really not back to, let's say whenever their covid symptoms ended whatever treatment they did, or didn't do if they're not pretty much back to their old energy and sleep patterns and exercise tolerance and everything in pain levels and all that In, I would say, you know, around 7-9 weeks.

That's a really good time to just go and, you know, at least do the basics and at least do you know, some good post viral care. And then you can see, okay, that made it better. Great.

You know, and you do more. That didn't make it better. We should probably step back and do more. And that's that's something that I think is really important to keep in mind.

– Thank you. I want to go back to something you mentioned in passing maybe about 10 minutes ago and opened that door a little bit more. And you talked about treating aggressively acutely in covid. And then, and then during that second wave, if it happens, will you tell us about the first wave of acute treatment and then the second wave? – Yeah.

Recognizing Delayed or Missed Long COVID

So and here's the way I would look at it, say if, you know, the patient comes and says, well, I have acute covid and, you know, here's what's going on.

If their history is such that they, you know, used to be one of my complex infectious patients or one of my toxic patients or anybody with any chronic illness history. Even if they were feeling 100% they're all better. Right that person we're not gonna wait for the second wave. We're gonna treat them aggressively from day one. If the person truly was super healthy before and there's nothing you know worrisome there I'm still gonna have them do the nutrients that are gonna be supportive especially vitamin D.

And vitamin C. And vitamin K. And you know ionophores for zinc like or E. G. C. G. And zinc plus other trace minerals. I'm not a fan of just giving zinc um etcetera. You know all of that stuff.

And I probably you know personally if it was my patient there's two other things in people if they can when they were early and federal if we could give them one or two high dose vitamin C. S. You know around 50 g that was extremely helpful in shortening the curve. Okay. But if they couldn't do that or even if they did I also tended to put people on some maybe more broad spectrum botanicals herbs for immune support and and you know some anti infective coverage.

So that sort of regardless of how bad off you were I would at least do that. If you were one of my patients that had

all this past history even if like I said the day before you got Covid you felt like you were all healed better.

But you got a history of all this other stuff. I would do all of that from day one and then I would add the stuff I would normally do in in the second worsening or you know the the second wave in in our practice that would tend to be something that had a combination of immune regulation, antiviral effects and other antimicrobial effects.

Usually opportunistic infection effects. And thing maybe why I adopted to some of these drugs earlier is they're the same drugs that are used off label in oncology.

And so I've been working with most of those drugs for a long time. And so those – Audience know that you treat a lot of patients with oncology that may not sorry with cancer, They may not know this. – Yeah. Yeah.

So that's sort of half of my practice is folks dealing with cancer. So the big ones are ones you've heard about. But what people sometimes miss and certainly on the news does not get reported is it takes something Ivor Mactan.

It's an anti parasitic drug. It also is an immuno regulatory drug which is why it's used off label in cancer, but it also does a number of other things that are actually antiviral and it probably has some other anti infective effect.

So it's not just, you know for parasites, it does all these things. Doxycycline uh which is one of the few drugs that cover the opportunistic bacterial infections and along is also shown now to be antiviral but also immuno regulatory things like Al Bend is all or Bend is all depending on what country you're in.

Same story used in oncology for the same reasons immuno leveling. So usually one of those would be in the mix maybe two depending because which we'll get to in a minute because of the research on opportunistic infections beyond covid Vira mia which really at this point is the least of your worries. The things you need to worry about the most now there's there's a zillion bugs that can grow.

So it could be anything but opportunistic bacterial lung infections is big. There's a number of fungal infections that are opportunistic that go crazy in the covid immune changes.

And then a family of virus, the H. H. V.

Acute Treatment and the Second-Wave Pattern

Family of virus and the famous one is Epstein Barr but there's a whole bunch of cousins they are shown to reactivate or activate and everybody's had those exposed. So it's not so much that it's maybe new.

It's just that when we're exposed and our immune system works we marginalized a lot of especially virus. And if my immune system has really taken a hit marginalized bugs just they opportunistically grow.

So as far as you know, looking at let's not worry so much about covid, let's worry about the bugs that the door got open for those areas. I feel have to be covered. And so normally I'm doing a mixture of medication and and botanicals for for that end of the spectrum.

The other thing with this newer focus in the research on the digestive track, the arrangement that goes on with Covid and we would do this anyway just because of the way maybe we look at practice. But I think it's important for, you know, if you're not thinking about it that way.

To see you, you've got this bug killing going on and immune support and all these goodies. When you're done with that, it's a really great time then to rebuild the good floor and the ecology of the G.

I. Track. And one of the nice things is that a lot of the derangement in the gut are going to naturally be kept at bay by most of the treatments I just mentioned for those other infections.

I believe most of the gut arrangements including activating uh small intestinal bacterial overgrowth, which now is

being reported. I believe that most of that comes from no treatment going on early when the the covid chemistry is throwing your immune system off and the guts.

Just another opportunistic place for things to over grow or do the wrong thing. So there's all those things we would be doing and of course then we'd be monitoring the person and seeing, you know, are they getting better etcetera.

And normally with with our folks, if they're either a chronically ill person from day one with Covid, we're doing that or they were healthy and they get the second worsening normally with either of those groups.

I have them continue the anti infective and immune support things for at least 2 to 3 weeks after they feel better. And the reason for that is that especially if we treated them early and they were feeling better in five or six days or 10 days, even a lot of the opportunistic infections don't go away in that short amount of time.

So usually we have, you know, we have them do a little ongoing and it's hard when you feel better to keep taking things. But we just described, look, this is preventing you from letting things get more, you know, out of control. So that's kind of the overall like the way I would look at treating someone now if if it's further down the road and like we were talking about, you get the person who it was six months or a year or two years ago and they really don't respond to, you know, general sorts of treatment Then as you alluded to stepping back and assessing them, like, like a, you know, chronic infectious patient etcetera.

Then we back up and we do look into toxicity. And sensitivities there some mold. Mycotoxins are very big, People often don't realize their immune suppressants.

And so that's it's like a double whammy if you're in mold but you're not noticing it and then you have covid in the immunity regulation. It makes a little bit of mold, you're exposed to like a very big amount of mold.

So the mold and chemicals and metals good to look at in the in that long term group um residual infections and also G. I. Tract ecology are very important to look at.

And then almost every primary hormone that runs your body is affected in one way or the other by those chemical side of kind shifts from the acute covid experience.

And the longer you're chronically ill, the more they just get um you know, less balanced. Your hormone system is trying to send messages to keep you know, your organs doing the right thing and keep your metabolic rate going and all of that when you deranged your immune system, your your body is set up so that the endocrine hormone system makes temporary adjustments for the immune response. When the immune response doesn't calm down for a long time, your body permanent. Makes those adjustments permanent.

So you can get resistance to thyroid and corticosteroid hormones, your adrenaline thyroid, your reproductive hormones which do many other things beyond reproduction. Can get really off balance, even insulin sensitivity and other very important things. So that's the top down anyway.

– Right? So what I'm hearing you say is that there is a way to prevent all of this from happening by pressing hard on infections that could already be dormant. Maybe. Typically you already know that these patients have had these infections or or are you doing a test maybe in the second wave, – You know, with the acute phase like I said, if you already know their history and I know they dealt with all these things, I'm just treat them as if from day one that we interact, you know, to work on those things if they were otherwise healthy and they do the second worsening thing, I'm gonna empirically treat them with those broad spectrum sort of things. And and then what I'm gonna tell them is when we get you on the let's say it's the classic thing where, okay, the first wave, not so bad. Second wave they call and say, I don't know what's wrong, but I'm way sicker. We put them on, you know, all the things if that person does what most of them do and they're better in, you know, 123 weeks and we we do another few weeks of treatment and then they're all better.

I'll say, well let's check in in a, you know, another month or something, make sure they're not developing any long. Covid if they sort of linger on though and it's like, yeah, I'm better but I just don't feel right and things aren't going

well, that person regardless of whether they had a history or not, that person at that point then I'm gonna do labs because they're a little more representative at that point. And I don't work.

I don't work in a system where like if I was in a hospital and I had to prove that they had infection X, Y or Z. You know, we're going on symptoms and the data, etcetera. But when you get to that, you know, early post covid time and they're saying I am not 100% I'm not as sick as I was.

But I have these lingering symptoms. Then I'm gonna do a very broad look into their hormonal picture including reproductive and adrenal thyroid. I'm also going to look at antibodies, you know, to anti adrenal antibodies, anti thyroid and all the others.

Look at auto immunity, which is also stirred up in these things. And a lot of people don't get that checked. And then I'm going to look for the most likely chronic infection. So, those again would be your atypical lung pneumonia, bugs. – You're talking about mycoplasma pneumonia and pneumonia. – Yeah. Mycoplasma pneumonia and community pneumonia.

The most common now in hospitalized patients. You do have to be extra careful because there'd be other bacteria that they will get that will be even worse.

And people, you know, die from lack of treatment of those bacterial infections. The only outpatient patient I have had passed away. It turned out that that was the problem and they we asked them to call infectious disease when he was admitted because the SATs were really low he couldn't breathe.

Um And he had sort of not treated and pushed it off for a while. And the saddest part was is that when he passed away the day before they finally called infectious disease and infectious, he said oh my he's got to you know very damaging bacterial uh pneumonia. And you know infectious agents.

And if we could have treated him earlier he probably wouldn't be so bad off. And that's that's kind of what goes on. But that tends to be if you're hospitalized.

Now the sneaky ones that you have to consider because they come up in any time there looked for our our fungal. So it's pretty easy to figure. Okay Epstein Barr is probably or it's family. We look at that family as an infectious agent.

We look at the chronic pneumonia bacteria. But the fungal ones certainly resistant candida like candida Taurus which is harder to treat than candy to alba.

Cons that's made a huge resurgence with covid. And it is very difficult to treat. Aspergillus aspergillus isse is really common and it has the double whammy of not only de ranging your gut but being uh and immune suppressant kind of all on its own and then if it becomes systemic you're really in big trouble.

So things like that. Some fungus that we might not normally think of. They can be very uh they can be key to the gut going way off the rails but also the immune system going off the rails. So we at least look at those guys.

And you know other things like I said that might be obvious to look into like hormones and toxicants and things like that too. – Right. I'm finding a lot of new infections in people's sinuses actually post this pandemic. For example say I have a current patient. This happens all the time actually.

And I found just mark cons in their sinuses we treat it and then they get covid we look at the sinuses. Not only has the markings returned but then they've got clubs, the Ella or fungus is that they just didn't have before.

And I'm finding this commonly now. And I'm thinking about the sinus brain connection and also the sinus lung. In fact I'm wondering if your if your thoughts about that.

– Yeah.

Testing and Treating Established Long COVID

Well and in the sinus allergy connection to um Yeah the the best explanation of that which makes complete logical sense I've heard is that because normally the first place that SARS cov two lands is in your oral pharynx which means it's going to get not only into your mouth and your throat and everything but also in your upper respiratory passages because you breathe there uh it goes and it's not so much that it actually brings other bugs with it.

It's that it settles there in the respiratory mucosa and then it does this switch with the immune signaling which your body is trying to fight and do the right thing.

But the switch is just far enough that the local immunity, especially in like your sinuses and your para nasal area in your mouth and throat and your lungs, the local immunity uh then is sort of busy and it's also imbalanced.

So a lot of things like we would we should be reinfected with very bad bugs every single day. But because we have immune response, especially in our mucosa, we don't, well these people then just become sort of like locally immuno suppressed and so they breathe in the smallest amount.

You know, as you said, Mark can come back. But weird things like Klebsiella and and fungus and many other things that you wouldn't normally see in an immuno competent person there right there. And I think one of the big problems in treatment has been, especially in the development of long Covid has been, you know, no one was really thinking that was gonna happen right?

And so, you know, we start looking in the obvious places, okay, pneumonia made a lot of sense early on. So a lot of people were looking there uh and then later, you know, g I tracts stuff, which is still very under looked at.

But a lot of times you know unless you're doing your nose and throat work and you're really into that stuff infections up there were just like well why would that even happen?

You know and it's it's like if you don't test you don't know and as you mentioned you know your especially your sinuses there's a lot of connection to chronic sinus inflammatory things and throwing off as you said your brain but also your your global immune system.

If you're at all allergic a topic it will make those things worse etcetera. So yeah it's you know there's an analog to that idea of why that happens. That's been in the ear nose and throat literature for probably 25 years and does get treated occasionally but it's very under under appreciated as a as a reservoir for trouble. – Right. I think of the sinuses as the gut.

Even I think of the beneficial bacteria that could be there in the pathogenic bacteria fungus is that could be there. I really think that people aren't thinking about this enough at all.

– The yeah the I think those areas are probably the the most problematic and the least tested for infections would be gut and and sinuses. Yeah. – What do you think about SARS covid two infecting the gut and then maybe that is resolved.

But then we're seeing this other gut derangement. I am seeing more club si Ella and I'm seeing more pseudomonas and I'm seeing more parasites than I ever saw him since this pandemic began. – Yeah.

And you know on the testing and I think that's one of the benefits to using you know early use of some of those broad spectrum things that also cover parasites because it keeps them from going. But there's for a class I was teaching for health care providers is reviewing the G. I. Effects because that's just all of a sudden everyone's researching that. And and there's some papers that show that uh sometimes SARS COv two is still alive. Way down the track in asymptomatic people which we see with other things are are G. I. Tracts have viruses that you know otherwise would be a problem. But G.

I tract kind of keeps them in place. I think the problem with that that SARS COv two, you know can get in the gut

and everywhere else is whether it hangs around a medium or a long amount of time.

And some of the research shows that's hanging around a long time in the gut. It's again triggering this immunity regulation that then allows the bad guys to kind of over gross. So you wouldn't even need to be exposed because we all have pseudomonas in our God and all that. It just allows the bad guys to over grow.

And the other thing is a lot of the things that over grow in the bacterial world are huge biofilm formers. So another thing and there's actually now a couple of papers about biofilms and Covid believe it or not um If if the infectious things especially in your sicker long term folks are not coupled with doing something with the G. I. Biofilms that becomes part of a perpetual cycle that goes on. You know you have biofilms in your sinuses to etcetera any mucous membrane. But the got ones problem – For a second to tell our audience what a biofilm is because a lot of them may not know.

– So in nature in first really most studied in like oceanography, any wet place bacteria will create biofilms. Now there are some bacteria that do create biofilms, others that don't. But the idea is it's a protective mechanism.

So if you're a bacteria and it's in the ocean you might want to have your you know community stay in one place and be you know safe and and be able to multiply so it may pick an object that the bacteria does not own such as a piece of coral or some other place.

And build this scaffolding where the family of bacteria can live. First place. We found it in people was on our teeth. And so it's very well known in in dentistry for example.

Well then it turns out that there's there's there's biofilms everywhere. You could have it in your blood system and everything but your mucous membranes are the number one location.

The problem is that if you get a biofilm forming bug and your immune system is unregulated, that's a bad combination because not only is the bug unregulated, but it's going to go into its propagation mode and say, well I'm gonna build biofilm, build a bigger community of my kind.

And then what happens is other things going to biofilm, you can pick up viruses and parasites and they're basically kind of protected them from treatment.

A lot of antibiotics do not break through biofilms very well, for example. And then as I say, they hide other, you know, other bugs in there. So biofilms are.

And here's something that you see, especially on social media because people like to argue about dumb things. Biofilms are completely normal and natural, but only at a certain level. Okay. And so if it's the ocean, that's I leave that to oceanographers. But in humans, um we have a normal level of biofilms, they're just there because they're they're what the research shows for pathogenic biofilms is, these are not like our normal ones that are part of our ecology, they're part of our gut, you know, bio balance the pathogenic ones are larger and more varied as far as who's living in them. And the longer you're sick, the bigger they get. And so those are not normal.

So you, you know, you leave alone the normal ones and try and open up the bad guys. But because, and I think it's not so much because of Covid directly, but because of the immunity regulation covid causes and then overgrowth of tiny amounts of, you know, the pseudomonas or the other guys Citra factor and stuff that live there.

They just grow because they can then the biofilm start usually. – Great. Well, thank you for the explanation. Is there anything else you want to tell the audience about? Long covid?

– I think that, you know especially if you're dealing with yourself or you have a family member dealing with it. It's like those of us who see people with chronic illness see all the time, but sometimes people who maybe they're known in their family has been chronically ill and now they are, it's a big social and adjustment to that.

Sinus, Gut, and Biofilm Involvement

Also it's not helped if your health care providers, you know, like I said, they're they're not, not many of them are trained generally what to do here with this and there are these uh you know, long covid centers that maybe do a little bit more, but they have year long waitlist. So it's like if you can't get to a provider who's going to help you and you still feel horrible and maybe, you know, you're the only person, you know who's like that it can become, you know very psychologically demeaning and demanding you're in your world, so if, you know somebody who's going through it, give them grace and help them, you know, find some help.

Final Advice for Patients and Providers

I think that the next thing is that for your own purposes, if you haven't had covid and you know, you do get it or family member gets it early, treatment really does seem to reduce long covid, but if that, you know, if that horse has left the barn already and you've got long covid, you really do need to find and it might be a couple or a number of health care providers who can help you with some of these more chronic things that are going on.

And I really think, you know, just encourage people to, It's hard in a lot of areas to find providers but do the best that you can to get help because there are ways to help it, the longer you wait, the harder it gets. And it is complicated.

It's not like acute care medicine. So you know, you really need to give yourself a little grace, but also get help. – That's a very important thing you just said amongst many important things you said today, but the part about it's not acute care anymore and I think that a lot of a lot of patients and doctors, the medical community might still be in that model of it's acute care now. So we're trying to put we in medicine or trying to put in acute care uh model of treatment onto something that's chronic and it doesn't support that model, it doesn't work. And it, like Dr. Anderson said to find the doctors that work in complex chronic illness and – That's why it's so frustrating to most of your primary care providers because their world is acute care and monitoring and and most don't do a lot of, you know chronic care with these sort of things. And it it blindsides the patient a lot of times because they didn't used to be chronically ill and now they are.

And so you have to kind of change your mindset to what you need medically. – Right. Right, well thank you, thank you so much, doctor and such a pleasure to have you here.