

# Parkinson's Disease in a Practice Environment Webinar Transcript

## April 21, 2022 with Dr. Mike Powell

### **Mike Whitmer:**

Good afternoon, and thank you for joining us today. My name's Mike Whitmer with NCMIC, and I'm going to be moderating today's discussion. Before we get started, there's a few housekeeping items I'd like to review. All listeners are on mute. If you do have questions that you'd like to pose to our guest, please enter them in the questions feature of your GoToWebinar menu. We'll address questions at the end as time allows, but we do have a full schedule today, so we'll try to get to as many of those as we can. Today's webinar is live and it's being recorded. A link to the recording will be emailed to you a few hours after the program. We will also post the recording in the resources section of NCMIC.com. Now, it does take a bit of time to process the recording and get it posted out there, so please be patient with us. The recording will be posted by Monday.

### **Mike Whitmer:**

Now, for today's program, have a quicken introduction here. Our guest today is Dr. Mike Powell. Nearly 1 million people in the US are living with Parkinson's, with approximately 60,000 newly diagnosed patients every year, so what are chiropractors faced with when a patient with Parkinson's or one who you suspect is undiagnosed walks into the practice? To help us dig into this, Dr. Powell has joined us. Dr. Powell has been teaching nationally and abroad for over 20 years. He is a second generation chiropractor and a graduate of Logan College of Chiropractic. He has practiced in Cedar Rapids, Iowa since 1996. The majority of Dr. Powell's patients have well-established neurological diagnoses or complex conditions that have not improved despite extensive care. He has a passion for sharing what he's learned from research, other doctors and his patients to help as many chiropractors as possible, and we're happy that he's here with us today to share his insights around Parkinson's disease. Dr. Powell, thank you for joining us and helping us with this topic.

### **Dr. Mike Powell:**

Thanks, Mike.

### **Mike Whitmer:**

Let's go ahead and dive right in, start with a pretty basic question. What is Parkinson's disease? When someone has it what's not working right?

### **Dr. Mike Powell:**

Sure. Parkinson's is a neurodegenerative disease. You think of arthritis, osteoarthritis has a bone or joint degenerative disease, issues occur over time and some things chip away at that chunk of the body. Neurodegenerative diseases are similar in that the part of the body is the brain. With Parkinson's, it's a very specific area of the brain. When you're a little baby, a large part of your brain function is devoted to what we call motor activity. That's moving and had little babies fidget all over the place, 2, 3, 4, 5 year olds, they're squirmy. Thoughts, emotions, little kids cry and laugh really, really easily, shifting your attention, so easily distracted, stuff like that. Then, as you get a little bit older, areas of the brain underneath of that develop to tap the brakes on that system all the time, and that's part of us maturing as kids, so it's great.

### **Dr. Mike Powell:**

This area, it's called the basal ganglia, it taps the brakes on that and it keeps us from being excessively fidgety and being able to focus when we need to stay focused and that stuff. It dampens all that motor

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

system. It dampens it all day long for us. Then, through some chemistry and signals, it allows us to move when we want to move, feel when we want to feel, think, shift our attention, that thing. Anyway, that dampening mechanism, that basal ganglia, it develops to tap the brakes to govern this system, but then when you want to take your foot off the brake, it's really dependent on a chemical called dopamine, a very important neurotransmitter. Dopamine allows basal ganglia or the braking mechanism to stop and let all this motor stuff happen.

### **Dr. Mike Powell:**

Well, Parkinson's is degeneration specifically of the area that dopamine comes from. There's an area in the brain stem that squirts dopamine out onto this braking mechanism to allow you to move, and feel, and shift your attention, and orient, and all that stuff all day long, and it really allows the motor system to function pretty well normally. But unfortunately, if that is the site that degenerates, then you get Parkinson's. If other areas degenerate in the brain, then it might be Alzheimer's or a frontotemporal dementia or something different, but that's what Parkinson's is. It's a degenerative disorder of a very specific area in the brain stem that makes dopamine that squirts up into the brain and so now it's deficient.

### **Mike Whitmer:**

Okay. What does it look like? What does Parkinson's disease look like when a person walks into your practice? How do they present?

### **Dr. Mike Powell:**

Sure. It's the opposite of that fidgety kid. They tend to have ... they just don't move as smoothly and naturally as most folks do. When we were in chiropractic college, we all had to learn a little bit about Parkinson's and I'm guessing everybody who's in on this class today remembers masked faces, shuffling gait, some of these things where a person loses their ability to express themselves physically. They tend to be very stiff. They do tend to have an altered gait that maybe includes a shuffle, and they just don't look around and orient in a normal way. The biggest issue, the biggest thing with Parkinson's is very much a difficulty initiating movement, and a person has Parkinson's and you ask them to get up off your exam table or get up out of a chair. You can almost see the wheels in their head have to turn and turn and turn and have them try mentally hard to basically squirt enough dopamine out into this basal ganglia, so then they can rigidly get up and then think again, and then put one foot and then the other, and then the other.

### **Dr. Mike Powell:**

Oftentimes, they don't have a lot of facial expression. They're not looking around your room and just the normal ways that people do, and so that's the biggest hallmark and ultimately becomes the biggest disability. Now, one thing with that, Mike, is that a lot of people, not everybody, but a lot of people with Parkinson's develop a tremor as well. That can be in the hands, certainly could be in the feet, face, voice sometimes, either tremors or some other types of abnormal movements with it. That can be a pretty big problem. It's the initiation of movement, that's the biggest disabling issue and the consequences of that. Then, tremoring can be significant along the way as well. That's the general picture of people with Parkinson's are on average, about 60 years old when they're diagnosed. Certainly, an older chunk of the population, I've seen lots of folks diagnosed in their 40s, and maybe even a little year younger once in a while, where they're starting to show some signs.

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

**Mike Whitmer:**

Yeah. I tell you, my stepmother was diagnosed with Parkinson's at, she says at age 35, and she was told that she had 10 to 15 years to live, and now she's 87. Of course, it has significantly impacted her life, but she's certainly exceeded expectations there. Treatments have advanced, I would imagine, in that amount of time as well.

**Dr. Mike Powell:**

Yeah. We used to think 5, 10, 10, 15 years was somewhat of a predictor. Really, now that the, certainly the consensus is that a person with Parkinson's has the same or close to the same lifespan as anybody else from that age moving forward, yeah.

**Mike Whitmer:**

But certainly with challenges during that life definitely.

**Dr. Mike Powell:**

Sure, sure. It certainly ... it can be disabling, certainly interferes with your life at minimum, but lifespan is usually pretty close to most anybody else.

**Mike Whitmer:**

Interesting. What's the chiropractor's role in all this with a patient living with Parkinson's?

**Dr. Mike Powell:**

There's a lot a chiropractor can do. When we look at a common thread, we're a pretty diverse group of folks, but we look at common thread through chiropractic is it is really a search for why does the person have the problem that they have? Then, what can we either provide them with or take away that's getting in the way of them being as healthy as they could be? That same philosophy, that same approach that's useful in so many things, I find is very helpful in Parkinson's. It is a difficult disorder. It is not one that there's any ease of turning the train around and curing that disorder.

**Mike Whitmer:**

Right.

**Dr. Mike Powell:**

It's more of a management and possibly slowing it down, maybe some improvements, but it's a tough one. Irregardless, a couple things. Every joint in your body sends signals to your brain when you move, and your brain, brain cells, neurons, they require that signaling just for the basic recipe of health. They have to have some signaling or they shift away from health and they start to shift towards degeneration. When chiropractors address posture, movement, alignment with their patients, we're promoting that movement, that signaling to the patient's brain irregardless of why they're in our clinic even whether that's our intent or not.

**Dr. Mike Powell:**

But certainly, that really promotes a major survival factor for neurons in the brain at the very, very basic premise of increasing this patient's movement. Of course, with Parkinson's, it's even a bigger deal

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

because the disease itself robs a person of that movement, even when they're moving too much and it's dystonic or tremoring, it's not purposeful. That's a big role right there. There's other things that the chiropractor can do to address multiple pieces of a patient's health in addition to this signaling function that we do irregardless with the patient, if we do adjustments with them and have a focus of some postural correction.

**Mike Whitmer:**

Yeah. One thing that chiropractors typically are very encouraging about, and I know mine is, is exercise, activities to help various conditions. My chiropractor has given me many through the years, do this, it'll help that. Anything like that with Parkinson's, with a Parkinson's patient? Any exercises or activities that can benefit them with this function?

**Dr. Mike Powell:**

Absolutely. Let's break it down into a couple of categories. One of them is on a basic sense, more movement is better, and that's true of Parkinson's as it is to other things. In general, stretching, yoga, anything that gets a patient moving is great. There's some really good community programs in most communities for Parkinson's patients, and sometimes they're just called Parkinson's exercise groups, but there's a couple of them in particular that docs should be aware of if they aren't already. If you Google big, BIG, and Parkinson's exercises, there's a program of exercises that involve exaggerated big movements, and that's where the term comes from that some therapists developed and oftentimes, there's these programs in your city, there are here around Cedar Rapids. BIG, big and Parkinson's can be useful. I think it's called big voice, that's some speech therapists develop as well as a parallel thing. That one, and there's some there's boxing classes that are specific for Parkinson's.

**Mike Whitmer:**

I read, when I was getting ready for this, that boxing can be beneficial.

**Dr. Mike Powell:**

Yeah. Yeah.

**Mike Whitmer:**

That's really interesting.

**Dr. Mike Powell:**

Yeah. Yeah. I think, in a minute, when I talk about some specific exercises that we might assign or use for rehab in our clinic, we might be able to make some sense out of that too. It's not me boxing you type boxing.

**Mike Whitmer:**

Right.

**Dr. Mike Powell:**

It's a boxing type exercise classes specifically for Parkinson's. There may be more than one iteration of this, but there's a school out there, it's called Rock Steady Boxing, ROCK, Rock Steady Boxing. One can be

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

trained and there are probably some folks around your town or your county that can make this available to your patients as well. We have that here in Cedar Rapids. That's really, really useful.

**Mike Whitmer:**

Mm-hmm (affirmative).

**Dr. Mike Powell:**

We have that. The other thing is, and this is more in a general exercise sense, anything that increases connections in the brain of a person that has a neurodegenerative disorder, Alzheimer's, other dimensions, Parkinson's certainly is a neurodegenerative disorder, anything that increases the connectivity between neurons, more branches, more crosstalk is usually pretty good. We know that pretty much the only thing everybody in neuroscience can agree on that provokes your brain to make the chemistry that encourages more connections, we call these nerve growth factors, miracle growth. Nerve growth factors in the brain is aerobic exercise.

**Dr. Mike Powell:**

If you can get your patient to do some aerobic exercise, get their heart rate up a little bit, get a little sweaty, a little winded for 20, 30 minutes, even more than that to get you in a sweet spot, pretty much everybody agrees that's a good thing, depending upon what stage one might present with Parkinson's that may or may not be doable, but it is for an awful lot of people. Both people that have a suspected issue with Parkinson's and fairly early stages of Parkinson's, those are certainly, certainly doable. The Rock Steady Boxing class would be one way to make that happen, but a stationary bike could make that happen as well.

**Mike Whitmer:**

Yeah. I would think a good long walk would do that as well.

**Dr. Mike Powell:**

Yeah.

**Mike Whitmer:**

That's doable.

**Dr. Mike Powell:**

Yep. Everybody agrees that more nerve growth factor in this situation is a good thing. Although there may be some other ways to provoke that, that seems to be the best one and the one that has, by far, the most evidence.

**Mike Whitmer:**

Yeah.

**Dr. Mike Powell:**

The third tier of the exercise thing is in terms of exercises in your clinic or specific exercises that you might assign to a patient. A couple of things with that. One of them that has been really beneficial with

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

my patients, and I think this is where the boxing thing may be helpful, alternating movements. I'm just going to show you my hands here, so if you had one closed and one open, that would be alternating movement. Now, you could do that as a march, a full body march like a cross crawl march, and really, the goal is to figure out with a couple of different alternating movements like that, do one thing on one side of the body and then in the exact same pattern mirrored on the other side, whatever that might be. The goal is to get a feel for how long the patient can maintain a rhythm. Doing it with a verbal count or metronome can be really, really helpful.

### **Dr. Mike Powell:**

Let's say that at your one and two and three and whatever, and you get up to 18, 20, and they gum it up. They're not so good with it, they get thrown off. You do that a couple of times with them and you find that, "Yeah, they pretty much can't get to 25 without what we just call an interruption." Then, therapeutically, what we would do is we would set a goal for 20 in a row, maybe in our clinic, but then maybe three sets of 20 at home day after day after day of that particular alternating movement, then we try to grow that in a row number, and occasionally test them. How we may set a goal for our patients in a whole variety of scenarios where at maybe the first re-exam in three weeks, we're going to be able to do this test and it won't provoke pain or they'll report some improvement or measure a range of motion.

### **Dr. Mike Powell:**

In the same way at the three week mark or this is a little longer game with the Parkinsonian patient, maybe with the month or two-month mark, then maybe that patient can do 30 of those in a row. That's a really, really useful one. My favorite one for that since gait is such an issue in people with Parkinson's and if you're going to have an issue with Parkinson's that shortens your lifespan, the most likely issue is going to be a fall.

### **Mike Whitmer:**

Oh sure.

### **Dr. Mike Powell:**

That's related to gait as well, but I'm just going to try to demonstrate this with my hands, but to do what I was showing you but with the feet. If you're watching this right now, or record it, doesn't matter. If you leave your left heel on the floor, but raise your left toes, so left heel on the floor, just in front of you sitting in a chair, but left toe is up. Left heel down, but left toes up and on the other side, keep your right toes down, but your left heel up. You got one foot toe up, one foot heel up, and then you switch them, and then you switch them. Just seated, that's a really good one. You could progress to standing with a handhold, but that's probably my favorite alternating movement to introduce maybe along with one for the hands, we may build up to a march. That one's really, really good, and you can grow that in a row number. That's one.

### **Dr. Mike Powell:**

There are many others, but that's one of the ones that I really like to go to. A couple of other exercises that I like and I saw in the questions that some of the docs send ahead to time, there was a few of them about, is there something we can do with the eyes that might be helpful? Absolutely. In the same way that just normal orienting movements, the movements we take for granted get suppressed when you

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

have Parkinson's. Eye movements are that way as well. That person with Parkinson's in your office or even maybe somebody that is starting to show some signs will, oftentimes, look like they're just staring.

**Mike Whitmer:**

Yeah.

**Dr. Mike Powell:**

Eye movements can be very, very useful because it's making you to use what's become weak. My favorite eye movement in that situation is, basically, an eye movement where I'm just going to put my hands in front of me, where they follow a target, but keep their heads still or still as they can, it may have a shake to it, but where they follow a target up with their eyes and then they glance back down, follow a target up with their eyes and then glance back down. We could use pens or we could put something on the wall, a lot of times I'll put a Post-It on the wall, another one above it and have them just run their finger from that Post-It and follow their finger up to the other Post-It and then look back down, but it's making them use an eye movement system, obviously.

**Dr. Mike Powell:**

The other thing that it does, this particular exercise, is it gives their vestibular system, their balance system, the illusion that they're falling forward. As you're our talk today, if you just imagine yourself from your desk chair, if you had your eyes open and you were falling forward and you were going to go turf it, you were going to put your head into the table or the floor ahead of you, what would happen is your eyes would follow whatever was ahead of you and then they jump and catch the next thing and the next thing on your way down. That's what happens as we fall forward. You can play with that yourself. What we want to do is, well, the vast majority of people with Parkinson's, maybe a hundred percent, become hyper kyphotic. They tip forward. All of our patients do this a little bit, but it's way accelerating the Parkinsonian patient, so they tip forward, head down. They do the opposite of what you would do if you were starting to tip forward.

**Dr. Mike Powell:**

If you're starting to tip forward and you'd put your head and shoulders forward, you'd break your nose, you'd go forward for sure. By using that particular exercise, a slow pursuit up, a quick saccade down, or the optokinetic version of that, where you use some stripes on a cloth, basically to do the same thing, by doing that, we hope to provoke the balance system into kicking off the reflexes that would have their brain say, "Hey, I'm falling forward, let's kick in some of these extensor mechanisms and put me back up more vertical with gravity." That's a really useful one. There's others, but that's, in terms of eye movements, that's one that I really, really like. We can go over a couple more if you like.

**Mike Whitmer:**

Yeah. Well, I actually want to go back to what you were saying earlier about boxing classes and classes that are specifically designed to help people living with Parkinson's disease. Where can docs that are out in their communities, where can they find those? Is that like YMCA community centers, community rec centers, that type of thing?

**Dr. Mike Powell:**

Yep. Just go online.

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

**Mike Whitmer:**

Google it? Yeah.

**Dr. Mike Powell:**

Boxing, your town basically. If you're in a pretty small town, maybe not, you may have that there, but you may need to send them somewhere nearby.

**Mike Whitmer:**

Right.

**Dr. Mike Powell:**

I'm in eastern Iowa and many of small towns in eastern Iowa have some of these, the Parkinson's support group, which is a ... there's a Parkinson's Association like an Alzheimer's association.

**Mike Whitmer:**

Mm-hmm (affirmative), sure.

**Dr. Mike Powell:**

Most cities have a chapter and they'll be great with resources there as well.

**Mike Whitmer:**

Yeah.

**Dr. Mike Powell:**

I know here in Cedar Rapids where I'm at, YMCA, some private gyms have these. There's a Parkinson's Association usually like the social hall at one of the church in town, and they have a couple classes a week. There's a lot of resources available. Sometimes you have to pay for them, sometimes they're free and they just meet.

**Mike Whitmer:**

Okay, great.

**Dr. Mike Powell:**

Yeah.

**Mike Whitmer:**

Thank you. When a person hasn't been diagnosed yet with Parkinson's, assuming very early stages of the disease process and they walk into a chiropractor's office, what are some of the clinical red flags the chiropractors can spot with that that may tip them off, this is what's going on with this patient and this patient, so that they just have a better understanding of what they might be dealing with.

**Dr. Mike Powell:**

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

Sure. Well, the things that start to not work right are physical biomechanical motor issues. Not many practitioners position better than chiropractors are to observe those things and really, "Hey, something doesn't look quite right here." I look at this to everybody and something's different about this person, so a couple things. One is falls. It's not a slam dunk that someone 40, 50, 60, that fell has Parkinson's, but it would be wise to keep that in the back of your mind and just go, "hmm, I wonder why that is." It's oftentimes, not always, but oftentimes without dizziness. They may complain of some unsteadiness, but just flat-out tripping, because Parkinson's interferes with your reaction time. I had said, the number one thing is initiating movement. Something happens, you need to step over it, you need to lean the other way, so you don't tip over whatever, and that seamless reaction that we considered to be healthy just doesn't kick in quite like it should and once in a while, somebody goes down. Falls are probably the most common one there.

**Mike Whitmer:**

Okay.

**Dr. Mike Powell:**

The other thing is that a higher than across the average percentage of the population, people that have a little bit of a tremor that may be an essential tremor, my dad had it, I've got it too or just a little bit of a shakiness. Oftentimes, they'll be aware of it and maybe they take some medication for it, but a lot of ... I don't want to say a lot of times, but a significant number of those people will progress towards Parkinson's.

**Mike Whitmer:**

I see.

**Dr. Mike Powell:**

Just on that same theme, oftentimes, that little bit of a shakiness, sometimes it's in the voice, sometimes it's in the chin, sometimes it's in the head, certainly hands, a lot of times people hide it and maybe they're in a little denial about it, because we consider that, we think of that as a sign of aging and when you're 40, 45, 50 years old, you're going, "I don't want to see any signs of aging," even though you maybe having some. Those are just some general things.

**Mike Whitmer:**

Yeah.

**Dr. Mike Powell:**

Now, a couple of big ones. When the person, and I've referred to this a couple of times, just doesn't orient and just have the feel for the normal movements that you see with other folks in your office, when you're talking to them, maybe they don't look at you all that often. It's not because they're indifferent and you've got a feel for this stuff as a [inaudible 00:28:33], not because they're indifferent, it's just that, "Huh! That's different. They are looking straight ahead." That, and then the same thing in terms of eye movements, a lack of what we call spontaneous eye movements, just the glancing around, checking out your diploma on the wall, looking at whatever, looking at maybe their spouses in the room when they first come in or somebody else is with them, that type of thing.

# Parkinson's Disease in a Practice Environment Webinar Transcript

## April 21, 2022 with Dr. Mike Powell

**Dr. Mike Powell:**

One of the things that I look at, and this is based on training and stuff that I use every single day, but there's no reason that any chiropractor couldn't look at, it's just looking at fast eye movements. Just very, very simply follow my finger and that test doesn't give you very much information in terms of, specifically Parkinson's, because your finger's moving kind of slow, but just mix a fast one in every once in a while and just look at, is there a significant delay when I move my finger to when then their eyes moving catch up? If they just don't seem like they're moving quite as much as everybody else, just in a very general sense. I know I'm not being very specific with that, but it's really a feel for things that our doctors have.

**Mike Whitmer:**

Sure.

**Dr. Mike Powell:**

Then, you see the same thing with the eyes, a delay or latency in initiating a fast eye movement, we call those saccades. A delay in initiating a fast eye movement, just simple little tests like that. One other way you can test that is just have the patient face to face, like we are on the screen with each other, look at your nose and just hold your fingers up to either side and then just say, "Hey, when I move one of my fingers and wiggle it, just take your eyes from my nose to that and just jump them back to my nose, and just have them jump their eyes one way jump them the other, mix them up a little bit. If you're seeing a lot of delays that would make me wonder if this person isn't progressing in that direction.

**Mike Whitmer:**

Yeah.

**Dr. Mike Powell:**

The general diminished movement, this delay in initiating fast eye movements, and then the one more thread you might want to pull is just when they're sitting and maybe when they're laying down, just move their, tell them to just relax their arm and leg and just passive movements of arms and legs. If it just seems a little bit stiffer than most folks that you move around, which we do it all the time with all of our patients passively move them, and then maybe tap a deep tender reflection, but just seems a little tighter and a little jerk here, those things would start adding up to a concern to me.

**Mike Whitmer:**

Yeah.

**Dr. Mike Powell:**

Yeah.

**Mike Whitmer:**

Let's say you've had that patient in today and you have that concern, because there were some of these telltale signs, how is this diagnosed? Would you then make a referral to a neurologist or an orthopedic? Who would you refer to? What would your next steps be, if you had that patient that you suspected? Is

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

the next step to work with them and see if things get better? Or, is the next step, refer them out, try to get a definitive diagnosis and what does that look like? I've got a lot in that question, sorry.

**Dr. Mike Powell:**

Step one is document what you saw.

**Mike Whitmer:**

Of course.

**Dr. Mike Powell:**

Then, document your concern that they may have some dampened motor function, and that's probably a good way to put it in your notes. Then, put down that you're going to recheck it, because they're probably going to come back. Irregardless, they're going to come back. We see patients multiple times, so then we're going to check it again. We check it again and you go, "You know what? Yeah, this is it just, it just doesn't look like everybody else. This looks a little tight and a little diminished. They're not 20 years old, they're a little older than that, and maybe they did come in with a fall."

**Mike Whitmer:**

Mm-hmm (affirmative).

**Dr. Mike Powell:**

A couple of things. One of them is I talk to them about that, is I tell them, "Your muscles are kind of tight. When I look at your eye movements, there's a delay in how fast they should move. I look at these in other people and when we see that delay, it doesn't necessarily mean something is specifically going wrong, but when areas of the brain that control your movements, aren't working as well as they could, we see some of this stuff." Sometimes we just get you moving and get you doing things that are healthy and it looks pretty good, but sometimes, it can progress to issues with your balance and your movement, and so that's basically where I go with that. Then, I keep an eye on them, and if it looks like, over the course of, and let's say a fairly short treatment plan in a chiropractic clinic is three weeks. Let's say over the course of three weeks, they look pretty good and I'm not seeing that stuff anymore, then we just make a note and we check it somewhere down the road again.

**Dr. Mike Powell:**

But if we continue to see those things, then I do talk to them about, "Is there anybody in your family that has a movement disorder?" What are movement disorders? Movement disorders are things like tremors, Parkinson's, some other things like that, and the reason is that's a way to bring it up. It doesn't necessarily mean that Parkinson's is always inherited. Sometimes it is, but it's not always. But then, if they do, or at least that opens up the conversation, if I think that this is interfering with their life.

**Dr. Mike Powell:**

Let me back up a second. There's no cure for this. There's nothing that anybody I'm going to send them to is going to do to turn off degeneration in their brain. doesn't matter who I send them to. They're not going to turn off degeneration in their brain. In all honesty, in my clinic and in some other places, we may be able at least point them in a better direction and slow that, which we can talk about in a minute. If I feel like this is interfering with their life, this is increasing the odds of them falling, that thing, then

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

absolutely, then the referral would be to a medical neurologist and that medical neurologist would likely check some of the same things that I checked and then they may prescribe medication that either replaces dopamine or makes dopamine last longer in their system. Basically, there's a bunch of medications. Sinemet is the most commonly prescribed one that they would then be on. If they respond to it, that's how you get the diagnosis of Parkinson's basically.

### **Dr. Mike Powell:**

Then you would go, "Well, they're dopa responsive, and so then we say, okay, we'll call that actual Parkinson's disease. If they don't respond to those medications very well, but that's what things look like, then they may go in and out of some other medications that help them or may not and possibly some head imaging. Head imaging usually doesn't tell us a lot other than, in that case, other than it clears the path that gets other things off the list. Really, in that situation, there's not a lot of other things that are going to show up on imaging, but that's how that goes. The majority of patients that probably present to our clinic with Parkinson's are going to be on one of those medications, because they're pretty standard and they're fairly effective at dampening tremoring and fairly effective at dampening the initiation of movement, at least for a while.

### **Mike Whitmer:**

Yeah. I want to go back to one thing that you said there about language you use when you suspect this. If a doc does have a patient that appears to be in the early stages of Parkinson's, we've talked about exercise, we've talked about referral to other providers, what can the chiropractor do to help their path? I'm not talking exclusively physically, mentally too, because this would be a lot to process for the patient.

### **Dr. Mike Powell:**

Then you're talking about somebody that has had a recent diagnosis or something Mike?

### **Mike Whitmer:**

Yeah, just somebody that's in the early stages and they're grappling with this. You've talked about exercises that you can give them that can help their path. Is there anything else along those lines that can help their path? How do you talk with them? Because we all know that chiropractors do serve not only the role of helping them with their physical ailments, but chiropractors are also are part mental health as well, just in the nature of what they do. What are some things that the doctors can do to help their patients that are dealing with this?

### **Dr. Mike Powell:**

I strongly suggest that we get our heads a bit to that mindset that I gave as a little example earlier in our talk here about osteoarthritis. A lot of patients, and there is nobody listening to this that hasn't had a recent comment from a patient about some part of their body that hurts where they didn't go, "Or doc, is it just arthritis and I can't do anything about it?" That's things a common misperception that people have. Arthritis, something has changed, it's changed over time, it's not as good as it was, and it's probably never going to be quite as good as it was. The idea that there's nothing that you could do about it is absolutely wrong and I think chiropractors, in general, embrace that and could come up with a pretty good laundry list and visit with you for an hour about those things pretty easily.

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

### **Dr. Mike Powell:**

I think it's important that people with Parkinson's and any neurological disorder understand that the healthier you are and, in general, the healthier your brain is, the less Parkinson's is going to affect you and the more effective the things that you're doing, like your medication or whatever we're doing in our clinic, are going to be for you. You have control over much of this. It doesn't mean that it can't progress. It does mean that you can tip the scales in your favor. You can stack the deck in your favor for moving better, moving longer, maybe it's not going to progress nearly as fast as it might have, and so I think that's a mindset of the doctor that we all have about arthritis in my example, that we need to just ooze that out to our patients. That's a big way to think about it.

### **Dr. Mike Powell:**

There's that, and certainly, most of us have patients that have Parkinson's whether we've intervened in any way with them or not or have really addressed specifically some of the stuff that I've talked about a little bit today that are examples of people with Parkinson's that are doing really, really well. Now, maybe they wish they were doing better, but they're doing well. They've had a diagnosis for 25 years and they're driving and they don't need anything. They're careful, they fall once in a while. Now, that's not everything, but that's certainly something. Let me give you just some specific tools here that I think that give the doctor some things in addition or married into what we talk about and also the patient can kind of buy into it as well.

### **Dr. Mike Powell:**

One of them is just what I mentioned, the healthier you are, the less likely that the neurodegeneration is going to accelerate. There are things that tell our genes to express for healthier cells or more fragile, more sick unstable cells. The more you can stack that stuff up the better. The doctor can help them identify areas of their physiology that aren't working as well as they should. If you're anemic, just for an example, the chances are higher that your Parkinson's is going to progress versus if your red blood cell carrying capacity for oxygen is appropriate. Look at that. Then, if you're able to intervene in some way, do it. If your blood sugar's not regulated well, same story. If your vitamin D is way, way low, same story. If you've got a lot of inflammatory markers and we have some strategies to decrease inflammation, all those things are triggers to genes that we know tip us towards neurodegeneration.

### **Dr. Mike Powell:**

This is very, very well-documented in other neurodegenerative disorders like Alzheimer's, but we're finding more and more evidence, and this makes sense, that neurodegenerative disorders like Parkinson's work in a similar way, so there's that. There's some basic nutrition that does make sense for people with Alzheimer's, and the one thing that I would write down that I would always utilize with a ... I said, Alzheimer's, I meant Parkinson's, that I would always use with a Parkinsonian patient is coenzyme Q10. That's the one with, as far as I can see and most would probably agree with it, the most evidence behind it. It's the one thing that's non-pharmacy that there are studies that have shown actual difference in symptoms and in function and very, very safe. About 300 milligrams a day seems to be a good dose of coenzyme Q10. That's pretty well-accepted in people that look at neurodegenerative movement disorders, which Parkinson's is by far the number one.

### **Mike Whitmer:**

Yeah.

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

### **Dr. Mike Powell:**

There are other things that support dopamine, I think they can be useful. There's a variety of different formulations for that. Certainly, the medications, they tend to support that dopamine system. Even though they don't necessarily make it stronger, they support it, so that can be very useful. Adjustments, absolutely. Educating the patient and maybe their family a bit about posture, just like you do with everybody else. The whole tendency for us to become hyper kyphotic is amplified and Parkinson's, so all the tricks and different things that we use with our patients to get their head up and shoulders back, this is a constant thing in all our practices, are certainly really important in these patients. I think this whole signaling aspect of the joints in the body via the [aphron 00:43:16] system to the brain is really enhanced by that.

### **Dr. Mike Powell:**

We went through a pretty good handful of exercises. In your clinic and in advising your patient on their home exercises, and even like when to go to the boxing class, the majority of them that have been diagnosed for a little while are going to be on a sinemet or a levodopa/carbidopa type of medication. I highly recommend you try to get your patients to do their stuff, their exercises, their class, their rehab with you, their visits with you in the first five or six hours after they take their meds. That provides a window of opportunity that closes as their day goes on. I try not to make them the last patient in the day, usually, it's a first thing in the morning medication, and through my own trial and error, and certainly plenty of error, I've seen where that makes a big difference.

### **Dr. Mike Powell:**

Not only that it's a good a visit today, but I do think that you get more traction. You're likely to get more good neuroplasticity provoked in the brain during that window of time, in the first hours of their dosage. I'll give you one more little thing like that that's simple, and it's fairly easy like that scheduling, right? That's scheduling and education that's really helpful. The vast majority of people that I work with that have Parkinson's and are tipping towards that, they function better with olfactory stimulation. Smells, so olfaction. There's a good bit of literature on this and it's super easy to do, seem to your olfactory areas in the brain are neighbors to some of the circuitry we're trying to affect, so we think that arousing the neighborhood, arouses the guy next door, which is part of this dopamine system.

### **Dr. Mike Powell:**

What seems to work best in my patients is, if we use food smells, smells of foods that they like and just spice covered type stuff, lemon extract, peppermint, coffee, chocolate, almond, and those little things you can get in a little bottle at the grocery store that's a couple bucks that you flavor some cake or something with, and just have them put it on a little cotton ball or something, and just wipe it on their upper lip and then do their exercises. Just use that, it's just simple. It's not going to hurt anything and it seems to make a pretty big difference in the vast majority of people that I work with.

### **Dr. Mike Powell:**

I've got a patient that I'm working with now who is same age as me. She's been diagnosed with Parkinson's for about five years, and at the end of her Workday, her right foot just rides around. It doesn't tremor, but it wants to move on its own. It's a dystonic movement that happens, and her movements become a little bit tougher. That's when her medication's wearing off and they've played with two smaller doses during the day versus just one. Just this little wipe of what we talked about has

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

been helpful to her and she notices a difference with it, which wasn't surprising to me. That's a simple thing that ... if you got simple stuff in your toolbox that aren't expensive and they work, you got to use them. Yeah. Those are a few of the things that I think I would put together with my patients with Parkinson's and that's what we do.

### **Mike Whitmer:**

One other aspect of that and what docs can help their patients with, you talked a little bit about that, the enzyme supplement and that thing, I would expect nutrition like everything else, good nutrition is going to positively impact the Parkinson's patient.

### **Dr. Mike Powell:**

You're right. Yes, absolutely. I see that in my clinic. We have some evidence in the literature for it, not a ton specific to Parkinson's in terms of neurodegenerative disorders. Once again, Parkinson's is just one of them, so they're a family of things that have some things in common. The evidence is really, really growing on that. What I like to do ... a couple of things. One of them is the patient and I together decide, "Okay, am I going to help you manage this as part of your chiropractic care? And if so," then we do basically what we just talked about. The other side of it is, are we going to really? Do you really want to try to dig in on this and try to understand what might be causing your brain to degenerate? Then, really address that.

### **Dr. Mike Powell:**

That's the functional medicine realm, which is very, very specific, where we get into is there are subtle anemia going on here, your testosterone level is off, and some of those things, some of them. Nutrition can be useful to address. It's certainly a key piece probably in most of them, but multiple factors, if nothing else, I really like whole 30, but don't cut out the beans. The whole 30 is just a real simple set of rules. I think most docs are familiar with that, and if you're not, a couple of key strokes and you will be. It's basically, no added sugar, no alcohol, no dairy, no grain and no beans. Several types of beans are actually a pretty good source of the precursors for dopamine, so that doesn't really make sense to cut that out, and I think it works really, really well without that, but that's a good way to eat in general, and I think it works well with this group of patients.

### **Dr. Mike Powell:**

I also suggest with that timing with the medication thing and your office visits, there may be a place for fasting and some of these patients from intermittent fasting, but in terms of their rehab, make sure that they've eaten in the last couple of hours as well. You want that rehab, the office visits with you to catch them when they've got the most resources available, and so at least a decent blood sugar level is important.

### **Mike Whitmer:**

Yeah. Okay. Well, we do have some questions that have come in online from our participants. We have time for a few of these. Let's see here. One is, can you address varieties of Parkinson's, and I'm getting out of my depth here, including Lewy body dementia? Does that make sense?

### **Dr. Mike Powell:**

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

Yeah. Yep, yep. A little bit, yeah. There are some proteins that our body makes called alpha-synuclein. It's an unstable protein, I wish we didn't make it, but we do, and it tends to not lay right and tends to misfold. If people with Parkinson's tend to have it gumming up the works in their dopamine-making areas. When those clump up and they make what we call inclusions, basically, it's a bunch of this misfolded protein, we call that a Lewy body. It's just a local cyst of this stuff on a way microscopic level. Oftentimes, those will tend to affect cognition as well when you have some of these Lewy bodies. I address these various diagnoses two ways. One is try to understand what's going on in their physiology that's accelerating or provoking neurodegeneration, like we talked about with understanding blood sugar regulation, inflammation, clearance of toxins, all kinds of things that can tip you the wrong way in terms of disease, and there's a few of them that are more specific for neurodegenerative diseases like the ones I just mentioned.

### **Dr. Mike Powell:**

That and then along with what systems are effective. Not everybody with, let's say a dementia, necessarily has a movement disorder, although a lot of times they develop them. Then, we try to support health generally and support the systems that aren't working very good. Then thirdly, how do we push, provoke, try to increase more connections in the systems that seem to be affected in that person? That's why, for example, our conversation today about Parkinson's, the things that I'm talking about are more associated with proper movement. I don't necessarily treat somebody with Lewy body disorder that much different than someone's with strictly Parkinson's disease with no indication of Lewy body. I look at more what they can and can't do and some of the why's.

### **Dr. Mike Powell:**

With that said, I just want to also mention that I think that establishing some of this supplementation, some of these eating habits, gosh, we even talk about sleep, but all the things that make your physiology work better are really, really important early on in your care of the patient or maybe you've been seeing this patient for five years, so early on in your care would mean now. Now is a good time to start whatever a person hasn't started already and that can certainly be concurrent with your adjustments. No question about that.

### **Dr. Mike Powell:**

Before you get a person doing some rehab that's specific to really pushing these fragile systems, I think it's wise to give their physiology a little boost and make their health a little bit more stable, and then encourage them to the Rock Steady boxing class, and then get them doing how many in a row of these alternating movements, these eye movements that I discussed, some of the other things that actually are what we would consider rehab, because once again, that theme I keep going back to is that the brain's kind of fragile in these folks, and if you push a fragile system too much, it doesn't turn out that good. We want to put them in a situation where they have the maximum resources available to them in terms of their physiology that they can, we talked about time of day, but also general health. Maybe get their blood sugar a little better if it's a little bit off, and then introduce those more aggressive things that go directly towards the deficits they're experiencing.

### **Mike Whitmer:**

Yeah. Okay. Of course, given the time we live in, we've got to have a COVID question. Have you seen anything that shows that a Parkinson's patient that has COVID? Does that have any impacts on their function, on their progress, that thing and it could be too early to tell?

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

### **Dr. Mike Powell:**

Yeah. The last couple years there's been obviously a race of research surrounding COVID and neurologic disorders are no different. It's been a lot easier to get my one case study of my one patient that had COVID and has Parkinson's or whatever published because it's hot topic. There have been quite a few published. I don't know that we can draw any huge insights. It could be no big surprise that an illness would make whatever condition you're dealing with worse, and that seems to be the case. That's what I've been able to draw from, which I think most folks would guess that.

### **Mike Whitmer:**

Yeah. Just one more and then we'll wrap up here. Safety issues. I thought that this was one that came in online that I think is really, really interesting. I would expect that if have people coming into your office that do have compromised ambulation mobility issues, getting them on and off the table maybe a challenge, so there could be some safety issues, I would imagine. Any thoughts around that?

### **Dr. Mike Powell:**

Absolutely, yep. We had an advantage there, that in my practice I see a lot of folks that have this for a variety of reasons. A couple things. One is, the more you can ... if you have handicap-accessible doors, great, if not, make a note on the schedule. Keep an eye out for that person coming out of their car. Staff person can go grab the door for them. Maybe there's a couple of doors to get into your office or whatever. It's a little thing, but that's definitely worth doing, and it's really appreciated. It's really, really appreciated. If you want to see the family members in your clinic, do stuff like that and you're probably going to see them as well. There's that. Certainly, high, low tables, vertical lift tables are helpful. Scheduling a little more time for the Parkinson's patient, especially on their routine office visits, if they're further along in the disease, just because it just takes them a little while just flat out move through your office, go from seated to supine to standing, whatever the case might be, those things.

### **Dr. Mike Powell:**

I also recommend, and not just for Parkinsonian patients, but traumatic brain injury, a lot of other folks, get just a nice thick, heavy gait belt. That's that belt that you see somebody maybe in a hospital that's recovering from a knee injury or something that had surgery. It's a handle that you can hang onto. They're not that expensive, they're 20 bucks or something. Have one of those around your office. It's a one size, fits all, because they snug way up. That can be helpful, especially if you're finding some difficulties with you physically transitioning folks. There are quite a few online resources and Lord knows videos just to show the techniques of how to help someone get from a wheelchair to transfer to a seated position.

### **Dr. Mike Powell:**

If you're not comfortable with that or maybe ... I'm okay with that, but then you go, "Wait a second. I weigh 140 and I've got this Parkinsonian patient who weighs 240, how are we going to do that?" There are very, very good ways of doing those things, but sometimes it takes a hand, a little help with that.

### **Mike Whitmer:**

Yeah, absolutely.

### **Dr. Mike Powell:**

## Parkinson's Disease in a Practice Environment Webinar Transcript April 21, 2022 with Dr. Mike Powell

Patients that are nurses in a care center setting, they're probably really good with of those things. You can maybe hear a little tutorial from one of them when they come in. Those are all things that we think about in our office anyway.

**Mike Whitmer:**

Yep. All right. All right. Well, we are two minutes before 3:00, so we have filled the hour.

**Dr. Mike Powell:**

Good.

**Mike Whitmer:**

I want to thank you so much, Dr. Powell, for joining us today. This has been a really of great information. I'm not a doctor, but I found it extremely interesting and helpful to me, so I appreciate it. Before we go. I do want to remind our listeners of the resources page on [ncmic.com](http://ncmic.com). This webinar will be posted there as soon as the recording is ready. Please give us until Monday to get that done, because that does take a little while. You can also keep up to date on new resources from NCMIC by following us on Facebook, Twitter, LinkedIn, and Instagram. Our next webinar is scheduled for the third Thursday of May, May 19 at 2:00 PM Central Time, so I hope that you'll be able to join us for that as well. Once again, thank you, Dr. Powell, and thank you to our listeners for joining us. Really appreciate it.

**Dr. Mike Powell:**

My pleasure.