

Will:

Aloha from Dallas, TX. Today we're here with Dr. Brandon Brock of the Carrick Brain Center. Thanks so much for joining us here.

Dr. Brock:

Thank you for having me.

Will:

You bet. Hey, so, can you give our audience just a general overview; what is functional neurology?

Dr. Brock:

Functional neurology is really a way to take the brain and its connections and make them more efficient, or to change the way that they, sort of like, the brain cells talk to each other in a way where a human can be more efficient, circumvent disease or damage that has happened.

The brain has been kind of seen as something that's static, doesn't change, it just sort of is the way it is, and we're realizing now that it changes based on what we do to it; the way we stimulate it in the environment that it's in. So we use different techniques to make the brain more efficient or to function more optimally for the person that may be suffering.

Will:

Wow, ok. So, although neurology is kind of a specialty, *functional* neurology is taking in the whole person, really.

Dr. Brock:

It—we're finding out that it does, because there are so many things that impact the brain. You know, if somebody has an infectious disease somewhere else in their body and it creates inflammation, it may impact their brain.

If somebody has some sort of other end-organ damage like gut problems or thyroid problems or endocrine problems, all of them ultimately have an effect on the brain, and then the brain ultimately regulates all those systems.

So we see if there's a problem in one area, it can change the other and these vicious loops of pathology can develop, and um, it's turning into one of those things where we find that good people that do this have to cross-train in disciplines.

Will:

Right. Yeah, well put, well put. So, in relation to oral health, ok, how do you see the relationship of oral bacteria, namely spirochetes, and neurological degeneration? Do you see a relationship there?

Dr. Brock:

It's really interesting you bring it up. There's lots of really developing research in this field that some of the oral—especially the spirochetes, are linked to different neurological diseases, in particular the ones in the world of neurodegeneration.

Um, there's some good stuff out there on viruses and spirochetes perpetuating inflammatory responses (especially within the central nervous system) that can lead to deterioration and certain diseases, some of them that have been named in part (maybe Alzheimer's disease or other types of atrophy of the brain).

And so, we know that it's not just one factor, there's genetic factors and lots of other things, but one thing can sort of speed up the process of another, and infectious diseases is one of them, there's no doubt about that.

Will:

Sure. We talk about in—in—in our world at OraWellness we talk about the "enemy inside the gates."

Dr. Brock:

Mm hmm

Will:

What people don't realize is that the bugs inside the mouth can and do swim into the rest of the body and cause chronic inflammation.

Dr. Brock:

Run to the vasculature and it's not a very far trip to the head. So, it is in the head, obviously, but in the brain. And so, you know, it's something to be concerned about. It's a very interesting field of study with a lot more research being done in it. So, uh, we have to take those things into consideration if we want to really, truly be brain doctors.

Will:

Right. What do you think of mercury? What's the risks of mercury both on the brain, as well as (I know you're a functional neurologist) so on the gastrointestinal (on the GI) as well? And in

particular, I'm wondering about mercury from dentistry or just environmental mercury like, you know, we hear about mercury in tuna and stuff like that?

Dr. Brock:

Yeah, obviously all of these heavy metals have a place, you know? I mean they're all necessary for something, but some of them are definitely more lethal or toxic, uh, than others.

And mercury is, you know, not just too long ago, was considered something that you could just hold in your hands and you know, it's used in dentistry; it's used all over the place, you know?

And we're finding out now that it is *really* toxic to a *lot* of things, in particular the nervous system, and all of these heavy metals can create [a] massive inflammatory response. You can even get autoimmunity to them. They can go right through the uh, bilipid membranes of cells and bind to DNA and you can get reactions to your own cells, and things love to penetrate the brain and store [themselves] there.

So we're finding now that significant heavy metal disease that's uh, your body can't process. It ends up kind of, you know, maybe storing in the liver or storing in certain tissues, one of them being the brain.

So it's something that uh, when there's a certain set of symptoms and there are certain types of exposure, that's one of the things that we at times look for, and if it's a problem, then you know, you've got to figure out a way to at least deal with it or—or get them somewhere where they can get it dealt with.

Will:

Yeah, yeah. I'm sure that—I don't even want to go there, because that's a tricky one.

Dr. Brock:

It is a tricky one.

Will:

So what can someone do if they're concerned about mercury exposure? Are there broad-brushstroke, good ideas?

Dr. Brock:

Well, there's all kinds of treatment. There's, "do you chelate or do you not chelate?" I mean, there's pros and cons for both of those.

There's, "do you leave it alone, or do you remove it?" There's pros and cons, you know, for both.

Uh, how do you test for it? Do you just do hair? Do you use blood? Do you use saliva?

That's one of the problems with some of these parts of medicine is there's so many components to just figuring out if it's there then if it is there, what do you do with it, and there's a lot of people with different opinions. And their opinions are, a lot of times, clinical observation. Because a lot of doctors don't have time to just sit there and research every method they use.

Will:

Right.

Dr. Brock:

So, there's a lot of confounding or variable factors out there, but what we do know is that it does cause problems, and the best way to take it out can be argued. But we know that there is information that's coming out that says, "Hey, look, if you're going to get things removed, like mercury fillings or something for instance, make sure you go to somebody that knows a little bit about what they're doing so they don't create second—you know—secondary exposure just from the removal."

Will:

Right.

Dr. Brock:

Uh, big topics. And a lot of people get better, and a lot of people get worse when they're, you know, have the right procedure to remove it.

Will:

That's what we've—we've heard quite a few stories of people getting autoimmune conditions as a result of having their amalgams removed.

Dr. Brock:

There's no doubt, and listen, your immune system can bind to the metal, and that creates a new complex. Or the metals can bind to different tissues, and so therefore it looks different to your immune system and it can react to it, and, uh, we see autoimmunity develop as a result of it.

Will:

Wow. Wow.

Dr. Brock:

Which is another abyss of diagnosis and treatment; it's difficult.

Will:

Yeah, no kidding. Um, ok, so what are some gems or some solutions you can offer, um, for—for just the general listener to better support their neurology?

Dr. Brock:

Well, one of the things is [to] stay active. Um, you know, a lot of people, staying mentally active is something that they don't do as much as they—as we used to.

One of the problems that we see is, people are using different types of technology to do the things that their brain is designed to do and used to do: storing data, recalling data, uh, even looking up facts and figures.

So what I would say is sometimes maybe put your devices down or your other computerized devices down and just use your brain for what it was designed to do.

The other thing is physical exercise. Um, we know that movement is one of the greatest things to increase brain volume. So, movement, uh, exercise, and brain stimulation are all things that are really important.

And if you have an infectious disease or if your joints hurt or something like that and you don't feel like moving, it will deteriorate you faster than the other.

And the other thing is just get with somebody who can teach you how to eat. Eat foods that, basically, you're not allergic to or get inflamed to. Um, big, big deal.

And then if you need to, find somebody who can specifically evaluate your nervous system and teach you things that might help your brain do its best in a specific fashion (that's where the functional neurologist comes in, I mean you've got to kind of plug that).

But, you know, diet, exercise, nutrition, and then, um, finding a doctor that you can trust, that you can visit on a regular basis, that can just talk with you about things and kind of coach you through stuff.

Will:

Right, right. Perfect. Dr. Brock, thank you so much for your time today.

Dr. Brock:

Thank you, pleasure.

Will:

So, where can people hear more about the Carrick Brain Center?

Show the world your smile :)

Dr. Brock:

CarrickBrainCenter.com, Carrick Brain Center's website. Um, lots of stuff on YouTube. Uh, you can just pretty much just get on the computer and find it. Not too hard.

Will:

Wow, thank you. Aloha.