



The Brain Briefing, Episode 1

Dr. Luedke: Exercise, Fitness, and Epilepsy Health, Nov. 16, 2022

Credits:

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Maria Perrone:

Welcome to the Brain Briefing, brief conversations with neurology experts with information for everyday people. With us today is Dr. Matt Luedke, a neurologist who specializes in the care of seizures and hospital patients. And today, we'll be talking about exercise, fitness, and epilepsy health.

Obviously, exercise and fitness is recommended broadly, but what are some of the benefits specific for people with epilepsy that might be lesser known?

Dr. Matt Luedke:

So yeah, there are a few major things to consider. One, if you look broadly at people with epilepsy, there are high rates of anxiety and depression. And there's really good evidence in the literature to show that fitness, exercise, cardiovascular exercise in particular, but also to weightbearing exercises and things like that, really can benefit people with anxiety and depression. So from a mood perspective, being healthy, being fit, engaging in physical activity is a great thing, and that's a critical component. If you look at people with epilepsy, one of the major components to quality of life is the existence of depression or anxiety independent of their seizures. So if you can treat that with medications, that's fine, but if you can treat it with stuff that you do just by getting out on the street and running, or jogging, or doing pushups and situps, that's a great tool to have at your disposal.

Second, cardiovascular disease is a quirky but persistent concern in patients with epilepsy. There's some evidence in the literature that shows that patients, particularly patients that have convulsive seizures that are frequent, can be at higher rates for heart problems. But even then, patients with epilepsy can be at higher risk of low cardiovascular fitness. And it's for a variety of reasons, multifactorial causes, but it is a finding that's in the literature. And so, if you can combat that directly with good cardiovascular fitness by doing things like running or jogging, or if your seizures are better controlled, things like cycling, that can be a great benefit for your heart in the long term.

And then finally, I think it's just important to know that some of the medicines we use can cause problems like weight gain. And while exercise isn't the sole or the main component of weight gain prevention, it is a factor. And if you can engage in physical fitness exercises and activities, you can help mitigate some of the side effects of seizure medications in those contexts. So that's an important thing to consider as well.

Maria Perrone:

What are some common misconceptions or misinformation about exercise and fitness for people with epilepsy that might be making people reluctant to start putting fitness into their lives?



Dr. Matt Luedke:

Sure. So unfortunately, one big issue is doctors are sort of protective folks. We don't want to see our patients hurt and patients of course don't want to see themselves hurt. So sometimes we make suggestions out of a well-meaning concern that are maybe a little overprotective. And one of those is avoid exercise, because you can get hurt during exercise. This is less of an issue than it used to be. But we used to tell people not to work out because we were afraid they'd hurt themselves with seizures. And certainly there are certain things that we probably shouldn't do, right? If we have, for example, driving restrictions within a few months of a seizure, and you probably shouldn't get on a bicycle because you're following the same traffic laws and you're at a lot of the same risks if you get into a big collision. But there are other things like jogging, using an elliptical, using a rowing machine, walking, things like that, that are very, very safe. No significantly less safe than just regular day to day activity. And they're essential to good health. And so, by all means, people should continue to do them.

The other thing is we have this concern sometimes that things can provoke seizures, like getting stressed out and is exercise a physiologic stress? And there are some studies that suggest that people actually have fewer seizures during exercise than they do otherwise. Certainly rarely, but it's demonstrated. Some people do have seizures during exercise, but that's a really small population, and that's something that you can establish pretty quickly. And if that's not you, then there's not a good reason not to get on the streets and put on your sneakers and run.

Maria Perrone:

Keeping all those things in mind, what are some of the challenges and some of your recommendations for people so that they can start working fitness into their life?

Dr. Matt Luedke:

So first and foremost, talk with your doctor. And I don't just mean your epilepsy doctor, I mean your primary care doctor. It's important to get a sense of your baseline health and safety. And if you haven't been working out for a very long time, or if you have other problems, like a history of heart disease or things like that, getting a good sense of who you are and what your baseline level of health is going to be important to determine what those next steps could be. Along those lines, if you've never really worked out in your life, and a lot of folks really haven't it into adulthood, working with a physical therapist on a start working out program or a strength and fitness assessment can help. And there are some physical therapy programs that have specialists who help get people back into or for the first time into the exercise game. If you don't have that and you have a doctor's clearance to work out, sometimes working with a personal trainer or a good friend who has worked out in the past and has some experience with that can be a good way to get started.

And then finally, beyond all those medical caveats, there's a certain, how do I put it? Level that you have to get beyond to get going. There's the old saying, objects at rest remain in rest. Objects in motion, remain in motion. And if you've never got out before, there can be an issue with motivation. It can be hard to start. So partnering with a friend, partnering with a family member, getting together to find that motivation, particularly if it's hard to find on your own, can be a really helpful thing to do.

So one consideration is talking with your doctor about getting a physical therapist. Physical therapists can do assessments of what you are capable of in terms of strength and fitness, and can help direct you and what exercises are safe for you and how to ramp up. Sometimes physical therapists are also covered by insurance, and that's an important thing, particularly if something like a personal trainer is a little too expensive. Additionally, physical therapists are experienced with working with people with things like



heart problems to ramp them up to a good level of fitness as well. So there's that background that can make you safer.

Finally, there are some things that people with epilepsy probably should avoid, and working with a physical therapist can help you find safe exercises for you that might meet your particular needs.

Maria Perrone:

Thanks to Dr. Luedke for talking to us today and thanks to you for listening to this episode of the Brain Briefing! You can find more info about the Duke Comprehensive Epilepsy Center at neurology.duke.edu/DCEC