



**National
Multiple Sclerosis
Society**

**MS Learn Online
Feature Presentation
Managing Your Symptoms: Tremors, Seizures and Balance
Featuring Dr. Michael Kaufman**

Tom: Hi I'm Tom Kimball

Tracey: And I'm Tracey Kimball, welcome to MS Learn Online. We are glad to have with us Dr. Michael Kaufman, a neurologist, to talk about three different symptoms of MS - tremors, seizures and loss of balance

Tom: In our last episode, Dr. Kaufman talked about spasticity. In this episode, he begins by explaining tremors.

>> **Michael Kaufman:** Well, when a neurologist thinks of tremor, we're usually thinking of a different aspect of movement. We're usually thinking about cerebellar and red nucleus types of control of movement, where we usually think of spasticity as some of the motor systems that originate in the cortex and the brain. So, there is a subtle difference with a neurologist. But I think we're talking about clonus, and clonus is the kind of tremor where you put your weight on the front of your foot and your foot starts to bounce.

>>**Rick Somers:** Right.

>> **Michael Kaufman:** And that's not what neurologists usually think of as tremor. The more common kinds of tremor we think of is somebody whose hand is extending and it shakes like this. If it's often just shaking like that, it's sometimes called a postural tremor. And people with multiple sclerosis have postural tremors that look like people with postural tremors from other causes that can be treated with a little bit of beta-blocker or one of the other drugs that are used in postural tremor.

Another kind of tremor is the pure cerebellar tremor, and this is kind of an exaggerated movement as you approach a target. Now, what I'm showing you is pretty bad. In most

people it's a lot more subtle than that. But that's thought to be what they call a cerebellar outflow tremor.

And some people have both. They have sort of a fine tremor that's there all the time, and the cerebellar tremor that gets worse as they approach a target. And that's what we usually mean by tremor. It's very hard to treat.

>>**Rick Somers:** Do you find that fatigue or exhaustion, or if you're fighting a cold, are these things exacerbated then?

>> **Michael Kaufman:** Yes, absolutely. Fatigue for sure. And, in fact, people without MS, if you've been out lifting weights or doing something really that stresses your muscles, people will naturally have a tremor. And so just think about amplifying that in multiple sclerosis.

>>**Rick Somers:** Do you have multiple ways of treating tremors?

>> **Michael Kaufman:** Well, the postural tremor is fairly easy to treat, and the most common treatments are beta-blockers, but they're not the only treatment. The cerebellar tremor is extremely difficult to treat.

>>**Rick Somers:** Cerebellar, implying that it comes from the brain?

>> **Michael Kaufman:** Yes, the part of the brain that's -- well, it's the cerebellum of the brain. It's in the back of the head.

>>**Rick Somers:** Okay.

>> **Michael Kaufman:** There are some drugs that occasionally help. There are some anticonvulsants that occasionally help. Often we have to get people to employ other strategies to control that kind of tremor. Weights sometimes. We've been doing something that I think is "off label," but we found that using a little Botox injections sometimes, which we use for spasticity. If you use judicious doses in the muscles where the axis of the tremor seems to be greatest, you can sometimes calm it down. We're kind of excited about that.

>>**Rick Somers:** And you've seen some success with that?

>> **Michael Kaufman:** We have, yes.

>>**Rick Somers:** Let's talk about balance, because I feel like they kind of go hand-in-hand.

>> **Michael Kaufman:** Yes.

>>**Rick Somers:** And what an MS patient can do to perhaps help them improve their balance issues.

>> **Michael Kaufman:** Balance is another cerebellar function and again very hard to treat. We rely a lot on physical therapists and compensation strategies for balance. So, initially we'll just tell people if they'll walk with their -- it's not very pretty -- but we have people walk with their heels somewhat apart. We ask women, they love high heels, we ask them not to walk in their high heels, it makes balance more difficult. Ask them to turn carefully. If that doesn't work, we'll suggest canes and rolling walkers and the like.

There are balance platforms that you can try to retrain the brain, and sometimes those are of some benefit.

>>**Rick Somers:** Those are the things, I think I've seen them in the gym, where you stand on it and you weeble and you wobble, but hopefully you don't fall down. Talk to me about seizures.

>> **Michael Kaufman:** Seizures are rare in multiple sclerosis, but they do occur. They probably occur with about twice the frequency as they do in general population.

For us, seizures haven't been particularly difficult to control in patients with multiple sclerosis. They usually respond to the same kinds of medications that people without multiple sclerosis use. And usually we just have to use one anticonvulsant. It's rare that we've ever had to use two anticonvulsants for patients with seizures. So, they're fairly easily treated. They sometimes can be promoted by some of the medicines that we use in multiple sclerosis.

>>**Rick Somers:** So, if somebody has a seizure, you obviously look at them and keep a watchful eye. Is that a precursor that this may be something that they'll have to deal with on a regular basis, or is it just too hard to say?

>> **Michael Kaufman:** Well, as I said, most people with seizures, sometimes people with multiple sclerosis will have a seizure and we'll treat them for a while. They won't really develop epilepsy; they'll have that one seizure, we'll withdraw seizure medicines after a year and they'll be fine. Other people have more permanent seizures. We don't know whether they would have had them anyway. But, again, they generally respond to anticonvulsants pretty well.

So, it hasn't been -- obviously, it's a big problem for patients. For the neurologist, it's something that we know how to deal with from people without MS. And epilepsy is usually milder in patients with multiple sclerosis and usually easily dealt with.

>>**Rick Somers:** So, we've talked about seizures and tremors and, again, let's talk about the importance of stretching and movement.

>> **Michael Kaufman:** Well, in terms of your balance, again, if you're spastic and you start off with imbalance, that will make it more difficult to balance. So, it's always good to stretch. There is a learning phenomenon that comes with repetitious movements. So, that's why the balance platform works in some patients, is that you can retrain parts of the brain. Used to not believe that many years ago, but experience has made me think otherwise. And so that there are strategies that you can do to actually improve, and one of the ways to help your balance is to stay loose.

>>**Rick Somers:** I know that when we go to the movies, they don't let me carry the popcorn anymore. That's pretty much across-the-board. I'll let anybody carry anything at this point. But as far as retraining the brain, physical therapy in a regimented program is something you would highly recommend if someone can do that.

>> **Michael Kaufman:** Absolutely. The fewer medicines you must take the better off you will be.

Tom : Well I have to remember if we ever go to the movies with Rick, I'll be in charge of the popcorn.

Tracey: Oh sure ... and then there won't be anything left for the rest of us!

Tom: At any rate ... thanks to Dr Michael Kaufman and Rick Somers for their fascinating discussion about managing the symptoms of tremors, seizures and loss of balance.

Tracey: And if you haven't seen the episode where Dr. Kaufman talks about spasticity, be sure to check it out.

Tom: And I'll bring the popcorn. Thanks for joining us.