



National
Multiple Sclerosis
Society

MS Learn Online Feature Presentation Understanding Exacerbations

Tom>> Welcome to MS Learn Online. I'm Tom Kimball.

Tracey>> And I'm Tracey Kimball. I know that an increase in MS symptoms can be very troubling. But it doesn't necessarily mean a true exacerbation is starting.

Tom>> So what exactly is an exacerbation, and how do you know if you're having one? Dr. Lael Stone of the Cleveland Mellen Center spoke with correspondent Rick Sommers about what an exacerbation is, possible causes, and potential treatment options.

>>Dr. Stone: An exacerbation is a relatively sudden change in a neurological dysfunction, but it doesn't happen quite suddenly. It's relatively rare for individuals to wake up with some new neurologic dysfunction. It usually will happen gradually over time. And we feel that this is part of the inflammatory component of the disease process. That is to say that some piece of the myelin is not functioning and would hopefully need to be repaired at some point in time. And that's part of what we hope the recovery process is from a relapse.

So, it's a sudden change not accompanied by any sort of a fever or other illness, which lasts for at least 72 hours or more.

>>Interviewer: Can myelin be repaired?

>>**Dr. Stone:** Well, we do know from pathological studies that myelin can be repaired, and our hope is that in the future we will be able to have medications which will either facilitate or actually help the body to repair myelin. We're not quite there yet, but many people actually have return of function after exacerbations, which we think is at least, in part, due to myelin repair.

>>**Interviewer:** A lot of us are holding out hope for that. A term I've not heard is a pseudoexacerbation. What is that and how do you describe that?

>>**Dr. Stone:** A pseudoexacerbation is an exacerbation that isn't really one, which, of course, is not a very helpful thing. But let me give you an example. I had a patient a number of years ago who developed double vision. It was clearly an exacerbation. His eyes were not tracking together, and then this gradually resolved without any treatment, with corticosteroids, with simply tincture of time. He would find that when he played tennis, when he played three sets of tennis, he would find that he developed some double vision. He would see two balls when he went up to serve. This would gradually get better after he cooled down.

And he came to me and he asked two questions: Number one, he asked, was this an exacerbation? And the answer was no, it simply -- it was return of an old incident of neurologic dysfunction when he became overheated. And, number two, was this a bad thing for him to have these pseudoexacerbations? Would this predispose him to further damage? And I must admit, I said I thought it probably would be a good idea if he took some time between those sets of tennis, drank some ice water and didn't get quite so overheated. So, that would be an example of a pseudoexacerbation.

>>**Interviewer:** Okay. And you see that fairly regularly?

>>**Dr. Stone:** Yes, because for reasons that aren't entirely clear, individuals with MS are very sensitive, often, to heat, and heat will bring out old symptoms, as will an infection.

>>**Interviewer:** Let's talk about stress and how that kind of plays into the equation.

>>**Dr. Stone:** You're right. There are some individuals who will have pseudoexacerbations in stressful situations. I have one individual that after he

recovered from an optic neuritis which caused him loss of vision in one eye, whenever he went in, in the year after the exacerbation to talk to his boss, he would find that he kind of grayed out in terms of his vision. Gradually, through time, either he adjusted to speaking to his boss in those circumstances or he had further improvement in the sheathing material, he no longer experienced that.

So, stress can cause pseudoexacerbations, but it also can put people in a situation where they may experience a true exacerbation if they have a spike in stress, or a stressful event may trigger an exacerbation.

>>**Interviewer:** Does everybody who is diagnosed with MS have exacerbations?

>>**Dr. Stone:** That's an excellent question, because there are many individuals who have multiple sclerosis who don't experience these sudden changes. They may just have periods of time where they gradually get weaker over a couple of years. We certainly have several clinical course designations, primarily the primary-progressive multiple sclerosis, that have no clear-cut exacerbations. So, there are individuals who do not have exacerbations and yet do have multiple sclerosis.

>>**Interviewer:** I'm your patient. I come in and am complaining about one thing or another that is clearly an exacerbation. How do you treat it?

>>**Dr. Stone:** Well, the first thing that we would recommend is that we make absolutely sure that there is no infection. If an individual has a sinus infection, if an individual has a urinary tract infection, or even a viral infection, then we don't want -- we want to get those sorts of things taken care of. And in that case we reassure.

Another thing that we always need to make sure of is that it's truly an MS exacerbation. This can be -- and I try to warn individuals who are given the diagnosis of multiple sclerosis, that when they have a symptom, that sometimes care providers who are not familiar with multiple sclerosis will attribute any new symptom of any sort to their MS. So, first we check for an infection, we make sure it's actually the multiple sclerosis.

And, lastly, if it's an exacerbation which is affecting function; that is to say, loss of vision in one eye or the other, difficulty walking, difficulty using the hands, then we might consider using high-dose corticosteroids.

Now, the corticosteroids that we're talking about are not the steroids that the ballplayers have gotten in trouble with. These are used in a very controlled setting, but they are very high dose, and they certainly have a certain number of side effects, and there are certain risks to their being used repeatedly. But if an individual really needs to kind of get a jumpstart and get moving again, get their vision restored, then we may offer them the opportunity to be treated with corticosteroids.

>>**Interviewer:** It's kind of like a power wash, where you're on this blast for a very short time.

>>**Dr. Stone:** That's correct. And individuals often experience their maximum effect of the corticosteroid treatment the very first time they're treated. And they'll often be a little disappointed that they don't get that same effect the second or third time.

>>**Interviewer:** What are some of the side effects?

>>**Dr. Stone:** I think we need to be very careful with individuals, that they are warned about the side effects, which can include a metallic taste. We often have people in our treatment rooms sucking lollipops or hard candies. Also, it can certainly upset the stomach. We often put people on various sorts of acid-blocking medications. Individuals with high blood pressure or diabetes, we have to be very careful, and sometimes we actually don't even use steroids. And there are some individuals who become extremely happy or extremely sad on steroids, and so there are certainly some emotional and mood effects that people need to be concerned about.

>>**Interviewer:** Can rehab help in managing MS attacks? Can they prevent or delay or defer?

>>**Dr. Stone:** Well, that's been a bit of a debate. Certainly, if you speak broadly of rehab in terms of physical therapy and general exercise, anything that keeps the

body in better shape and in better -- keeps an individual sleeping and feeling better is going to have a certain effect, potentially, on reducing the chance of relapse.

Also, a very common time when people will recommend physical therapy would be after a relapse, treat with steroids or not, and then recommend physical therapy to alleviate some of the other symptoms, improve walking or hand function, or whichever is most affected.

Tracey>> It's really important to understand the differences between a true exacerbation and a pseudoexacerbation and what someone can do to help themselves in the middle of one.

Tom>> Thank you Dr. Stone for shedding some light on this topic.

Tracey>> See you next time on MS Learn Online.