

National Multiple Sclerosis Society

## Prevalence of Cognitive Symptoms across the MS Disease Course Featuring: Dr. Anthony Feinstein & Dr. John Deluca

## **Dr. Anthony Feinstein**

So the prevalence of cognitive impairment will depend on the group that you're studying. So if you look at the individuals with relapsing and remitting multiple sclerosis, then you're probably going to get 30 to 40 percent prevalence rates of cognitive difficulties. If you move up to secondary progressive MS, the rates go up to perhaps as high as 60 percent. If you look at patients with a primary progressive MS, the literature's a little uncertain but probably the rates are higher in secondary progressive than they are in primary progressive and they're probably higher in primary progressive than they are in relapse and remitting and so you seem to see a—a differential across the, uh, the types of disease.

If you look at patients that have benign MS, very few physical symptoms and they've been this way for many years, there is still evidence to suggest that this group might have cognitive difficulties as well so up to 20 to 30 percent of individuals with benign MS might show a degree of cognitive compromise, which of course begs the question, is it really a benign disease when you're struggling cognitively? It might be benign from a physical perspective but certainly not from an intellectual or a cognitive perspective.

## Dr. John Deluca

So there's really a lot of areas of the brain. There's a lot of pathology that can go on. And we don't understand all of it, but we know that when we look at all of these areas they correlate with cognitive dysfunction. Early on in the disease you might have more of an inflammatory process, so there's sort of inflammation going on in the brain, which disrupts the efficiency of brain functioning. And in that process, in that area you might see problems like in processing speed, because the brain is just less efficient. Um, but you also get damage to the brain. And that can happen either early on, or it can happen later on.

Cognitive problems can be related to other disease factors. The most significant one is perhaps the stage of the disease. Someone early in the disease can have very severe cognitive problems. And someone much later in the disease who've had it for many years may have no cognitive problems. But in general, earlier in the, in the disease during like perhaps the relapse and remitting stage the, the, um, the, severity of the, uh, cognitive

problems tend to be less in general on average. And when you move into, into more of the progressive stage of the disease the problems tend to be greater, more severe.

For example, processing speed is, uh, is a significant problem in relapsing and remitting. Working memory tends to be less of a problem. But as you progress into, into the progressive stages you tend to see both. And the learning and memory problems tend to be more severe. People with MS who of a longer duration tend to have, uh, greater cognitive problems. You can have the disease for 30 years and have very few cognitive problems. Or diagnosed early on and be very severe. But in general there's, there's a correlation. You can be very physically impaired and have no cognitive problems or vice versa. So there's no real strong correlation with that.

Getting help for cognitive problems is critical, it's really important. The first thing you should do is talk to your, to your physician. Um, it's just being understood today that cognition is a significant problem.