Transcript Details

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/neurofrontiers/multiple-sclerosis-explained-understanding-its-epidemiology/32371/

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

Multiple Sclerosis Explained: Understanding Its Epidemiology

Announcer:
You're listening to *NeuroFrontiers* on ReachMD. On this episode, we'll hear about the epidemiology of multiple sclerosis, or MS, from Dr. Jonathan Howard. He's an Associate Professor of Neurology and Psychiatry at NYU Grossman School of Medicine and the Director of the Neurology Service at Bellevue Hospital. He will discuss the epidemiology of multiple sclerosis, or MS. Here's Dr. Howard now.

Dr. Howard:
So some basic facts about MS, or multiple sclerosis, is that it is an immune-mediated disease of the central nervous system—meaning the brain and the spinal cord—in which the myelin, which is the coating of nerves, becomes affected, and nerve communication becomes disrupted. Its main symptoms are visual, so loss of vision in one eye or double vision; a sensory symptom, so numbness in some part of your body, on one side of your face, or maybe half of your body, below your chest; or some sort of weakness or incoordination. The symptoms come on in terms of relapses and flares for most people, meaning that they begin rather abruptly—not a stroke, not some instantaneous sort of thing—and they usually last a few days if not a few weeks. That's the most typical presentation for someone with multiple sclerosis.

The disease is most common in young people—at least that's when it starts, in their 20s and 30s. It is more common in women than in men. It affects about one in 750 people here in the United States, and it is the most common cause of neurological disability in young people, aside from trauma.

Most people with MS don't have a family history of the disease. Their parents don't have it, and their children don't have it. There are many genes that have been linked to multiple sclerosis. However, if you look at studies of identical twins, if one twin has the disease, the odds that their identical twin will have the disease are less than 50 percent. For women it's about 30 percent, and for men it's even less than that—about 5 percent.

There are several environmental factors that have been associated with the onset of MS, some of which are modifiable, such as obesity, smoking, and head trauma. And probably the strongest risk factor is infection with the Epstein-Barr virus, though almost everyone has been infected with that virus. Something like 100 percent of people with MS have been infected with Epstein-Barr virus, which is the virus that causes mono. But really, we don't know exactly why one person gets MS and why one person doesn't.

So how do we diagnose MS? The most commonly used techniques to diagnose MS besides a history and physical are MRIs, which usually show the characteristic signs of MS. However, a lot of MRIs can show white spots even in normal healthy people, so if there's any doubt, a spinal tap may be needed to look for a marker of inflammation called oligoclonal bands. And if someone doesn't have those, then it's pretty unlikely that they have MS.

I have been treating this disease for about 15 years, and the treatment of MS has totally changed over the course of that time. Patients who are diagnosed with MS today have many, many treatment options that are much more effective, convenient, and safe than when I started treating this disease just in 2010, not that long ago. We don't have a cure yet, but a lot of patients who are newly diagnosed with MS today are not facing the same future of disability that their parents or grandparents might have faced had they been diagnosed 20 years ago, and the future, we hope, will only be brighter and better.

Announcer:
That was Dr. Jonathan Howard talking about the epidemiology of multiple sclerosis. To access this and other episodes in our series, visit *NeuroFrontiers* on ReachMD.com, where you can Be Part of the Knowledge. Thanks for listening!