

Cognitive testing, gender and brain lesions may predict MS disease progression risk

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Cognitive testing may help people with inactive or benign multiple sclerosis (MS) better predict their future with the disease, according to a study published in the July 29, 2009, online issue of *Neurology*, the medical journal of the American Academy of Neurology. Gender and brain lesions may also determine the risk of progression of MS years after diagnosis.

By current definition, people with benign MS are those who remain "fully functional" after 15 or more years from disease onset. However, people with benign MS occasionally develop renewed disease activity or progression, and can experience severe symptoms.

For the study, researchers looked at the [cognitive test](#) results and [brain scans](#) of 63 people with benign MS during a period of five years. Of those, 43 were women and 20 were men.

The cognitive tests included verbal and [visual memory](#), attention, concentration and the speed at which the participant processed information. Brain scans revealed the number of lesions associated with MS on the person's brain. Follow-up neurologic exams were done every six months.

The study found that nearly 30 percent of people with benign MS significantly worsened over the course of five years. People who failed more than two cognitive tests (out of 10 total) were 20 percent more likely to progress over time. Men with benign MS were nearly three

times more likely to later experience signs of MS compared to women. People with more [brain lesions](#) detected on scans were also more likely to develop signs of the disease.

"Our findings strongly suggest that a person's gender, cognitive state and amount of lesions on the brain are important factors for predicting MS progression," said study author Maria Pia Amato, MD, with the University of Florence in Italy. "Our study highlights the importance of cognitively testing people with benign MS who appear to be healthy. This information might be important in tailoring the patient's treatment."

Source: American Academy of Neurology ([news](#) : [web](#))

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