

# Marijuana use may hurt intellectual skills in MS patients

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Any possible pain relief that marijuana has for people with multiple sclerosis (MS) may be outweighed by the drug's apparent negative effect on thinking skills, according to research published in the March 29, 2011, print issue of *Neurology*, the medical journal of the American Academy of Neurology.

Some clinical trials have reported a mild benefit of [marijuana](#) on pain, bladder dysfunction and spasticity in MS, an auto-immune disease that affects the brain and spinal cord.

The researchers studied two groups of 25 people each between the ages of 18 and 65 with MS. One group used marijuana and the other reported no marijuana use for many years. Urine tests were used to confirm use or non-use of the drug. The groups were matched so there would not be significant differences due to age, gender, level of education, IQ before diagnosis, level of disability and duration of time with MS.

On average, the duration of marijuana use was 26 years. A total of 72 percent of users reported [smoking marijuana](#) on a daily basis while 24 percent reported weekly use and one person reported bi-weekly use.

Participants' [cognitive skills](#) were tested. The research found that people who used marijuana performed significantly worse with respect to attention, speed of thinking, executive function and [visual perception](#) of spatial relationships between objects. For example, on a sensitive test of information processing speed, those using marijuana scored

approximately one third lower than non-users. Those who used marijuana were also twice as likely as non-users to be classified as globally cognitively impaired, defined as impairment on two or more aspects of intellectual functioning.

"Given that about 40 to 60 percent of [MS patients](#) have problems with cognitive function to begin with, any drug that may add to this burden is cause for concern," said study author Anthony Feinstein, MPhil, MD, PhD, with Sunnybrook Health Services Center and the University of Toronto in Ontario, Canada. "This study provides empirical evidence that prolonged use of inhaled or ingested marijuana in MS patients is associated with poorer cognitive performance, and these effects have to be weighed against any possible benefit of using marijuana for medicinal purposes."

Provided by American Academy of Neurology

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