

Considering Cannabis

BY MARCELLA DURAND
WITH NANCY HOLLAND, EDD, MSRN

The use of medical marijuana is illegal in the United States. But cannabinoids—the active compounds in marijuana—may have the potential to help manage difficult MS symptoms, including pain and spasticity. Researchers around the world, including some in the United States, are continuing to explore the potential of these compounds.

Cannabinoids protecting nerves?

Several studies in mice with an MS-like disease suggest a surprising new direction for marijuana components—the potential of cannabinoids to protect central nervous system tissues.

In **Spain**, Dr. Fabian Docagne and colleagues at the Instituto Ramon y Cajal, found that the use of the synthetic cannabinoid **HU210** reduced axonal (or nerve fiber) damage in mice. The findings were published in the January 15, 2007, issue of **Molecular and Cellular Neurosciences**.

In the **United Kingdom**, researchers at

the University College London Hospitals have launched a number of investigations into cannabinoids and neuroprotection, involving both laboratory studies of nerve cells and experiments with mice.

Also in the U.K., a large, multi-center trial coordinated at the Peninsula Medical School in Plymouth is studying the cannabinoid THC (tetrahydrocannabinol) to see if it can slow disease progression.

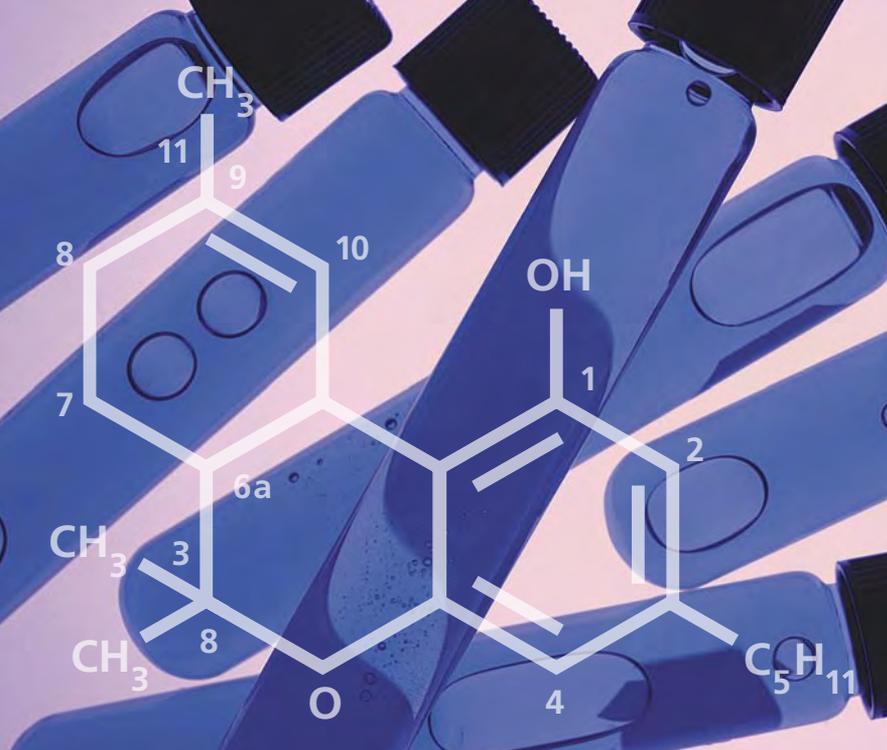
Cannabinoids and pain

In **Canada**, a cannabis-derived oral spray called Sativex is approved to treat neuropathic pain in adults with MS.

In the **U.S.**, the FDA has granted approval for a study of Sativex in people with advanced cancer who do not respond well to morphine or codeine. Proponents of Sativex for MS pain will follow this study carefully.

Cannabis and spasticity

In the **U.K.**, researchers reported on a six-week placebo-controlled trial of Sativex to



“A large placebo-controlled clinical trial in the U.K. became unblinded when people receiving the active drug realized they were taking it,” Dr. Holland said. She also pointed out that cannabis can adversely affect memory and decision-making, which can be problems for people with MS anyway.

Cannabis Task Force recommendations

The National MS Society has formed a Cannabis Task Force, chaired by noted MS expert Dr.

Alan J. Thompson, to review published studies on medical marijuana and make recommendations. These are likely to include requests to:

- Develop better outcome measures
- Create a consensus on standards for clinical trials of cannabinoids for MS symptoms.
- Develop an inhaled mode of administration that would give results as close to smoked cannabis as possible.
- Obtain data on long-term side effects.
- Limit symptom management studies to people who do not respond to other drugs or therapies.
- Aggressively study the drug’s potential neuroprotective benefits.

All recommendations from the Task Force must first be approved by the Society’s National Clinical Advisory Board. ■

Marcella Durand writes frequently for this magazine. Nancy Holland, MSRN, EdD, is vice president of Clinical Programs for the Society.

relieve spasticity in 189 people with MS. While 40% of the people on active treatment said they experienced at least a 30% reduction in self-assessed spasticity compared to 21.9% of those taking a placebo, other outcomes, including the more objective Ashcroft Score for spasticity, did not show any statistically significant benefit.

In the U.S., Dr. Mark Agius and his colleagues at the University of California, Davis, are conducting a Society-funded clinical trial to test the safety and effectiveness of smoked marijuana and oral tetrahydrocannabinol, a cannabis derivative, to treat spasticity in people with MS. This trial is designed to use a novel objective method to measure spasticity, for rigorous outcome data.

Risky business

The law is not the only thing making it difficult for researchers to test the medical potential of marijuana. Side effects of cannabinoids have affected the outcomes of some studies.