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'First time we have turned the tide' on MS

NU | Injecting early patients with own stem cells seems to reverse disability: researcher

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Injecting early-stage multiple sclerosis patients with their own stem cells appears to dramatically reverse disabling symptoms associated with the disease, researchers at Northwestern University's Feinberg School of Medicine have found.

"All therapies to date ... have focused on slowing the progression of disease," said Dr. Richard Burt, Northwestern's chief of immunotherapy for autoimmune diseases. "What this actually did is that it reversed disability. This is the first time we have turned the tide on this disease."

The successful use of stem cells to reboot MS patients' immune systems could be a big step forward in the treatment of the disease, in which the immune system attacks the protective covering of nerve fibers in the brain and spinal cord -- the myelin sheath.

Still, Burt cautioned that his results -- being published online today by the British medical journal *The Lancet Neurology* -- need to be duplicated in a broader study. "It's encouraging, but, honestly, it's unproven until you have a randomized trial that proves it," he said.

Also, in earlier studies he did, Burt said stem-cell treatments did not have the same beneficial effect on people with more advanced MS.

Burt's latest research involved 21 patients nationwide with what's called relapsing-remitting multiple sclerosis, an early stage characterized by periodic bouts of symptoms that include difficulty walking, slurred speech, fatigue and vision loss. Patients had their own stem cells extracted from their blood before being treated with chemotherapy to destroy their immune system. The stem cells were then re-injected to create a new immune system.

Eighty percent showed significant reduction in disability two or more years after the stem-cell treatment, Burt said. The rest saw little to no change.

Fifty-year-old Barry Goudy, of Woodhaven, Mich., was one of the success stories. Goudy was diagnosed with MS in 1995. Since his stem-cell injection in 2003, Goudy said he hasn't had the fatigue, blurry vision and weak limbs he used to experience with every relapse. Goudy noticed improvement in his symptoms within six months.

Now, he's back to working full-time at a car dealership and said he doesn't have to get weekly and monthly drug injections anymore to keep his condition in check.

"Life is very good," Goudy said. "I have no restraints anymore because of MS."