



Stem cells could help treat ALS U-M to oversee clinical trial on 12 patients in Atlanta

Kim Kozlowski Tuesday, September 22, 2009

A leading neurologist at the University of Michigan will oversee a federally approved clinical trial involving stem cells that researchers hope will hold a key to slowing the progression of Lou Gehrig's disease.

New cases of the fatal, neurodegenerative disease known as amyotrophic lateral sclerosis (ALS) are diagnosed in 5,600 Americans annually. Patients with the disease, which ultimately leads to paralysis and the inability to speak or move, have a three- to five-year life expectancy.

The U-M clinical trial, approved by the U.S. Food and Drug Administration, centers on injecting stem cells into the spines of patients with the disease, with the first step determining safety.

"This is not a cure," said Dr. Eva Feldman, the trial's principal investigator, the Russell N. DeJong professor of neurology, and director of the Neuropathy Center at U-M Health System in Ann Arbor. "It's a first step, but a very important step."

One treatment is available for the disease; it extends life by only a few months.

The clinical trial will be conducted with 12 patients at Emory University in Atlanta with fetal-derived neural stem cells patented by Maryland-based Neuralstem Inc.

The patients will receive five to 10 stem cell injections in the lumbar area of the spinal cord and be re-examined regularly, with a final data review two years later.

"We will follow these patients for as long as they live," said Richard Garr, president and chief executive of Neuralstem. "We hope that will be a long time."

The trial is based on the research of Feldman, who discovered that injecting stem cells into rats with ALS preserved the large motor neurons and muscle strength that normally die in patients with the disease.

Feldman said the trial also could assess the safety of using stem cells in patients suffering from other neurodegenerative diseases, such as Parkinson's and Alzheimer's.

For now, advocates of patients with ALS were pleased about the announcement, though patients may not see results for years.

"Our hope in the future as the trial expands is that this will be a meaningful approach to treat patients with ALS," said Lucie Bruijn of the ALS Association in California.