

Researchers target multiple sclerosis

November 22 2006

U.S. scientists say they have developed a substance that inhibits the progress of multiple sclerosis in an animal model.

The scientists at the State University of New York's Downstate Medical Center say the agent, a calpain inhibitor, can be administered orally.

Calpains are a family of proteolytic enzymes naturally found in the human body. Inappropriate activation of calpain is associated with a number of neurodegenerative and autoimmune diseases, such as MS. It is known to destroy the myelin sheath that coats and protects the nerves.

The researchers say they used the calpain inhibitor for the treatment of a mouse model of MS. Whether administered by injection or by mouth, the inhibitor was shown to reduce clinical illness signs and prevent demyelination and inflammatory infiltration in a dose- and time-dependant manner, holding promise in treating both the acute and chronic phases of MS.

The scientists say the inhibitor might also be successful in treating other degenerative illnesses, such as Alzheimer's, Huntington's and Parkinson's diseases.

The study appears in the current issue of the Journal of Neuroimmunology.

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Citation: Researchers target multiple sclerosis (2006, November 22) retrieved 5 May 2024 from <https://medicalxpress.com/news/2006-11-multiple-sclerosis.html>

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