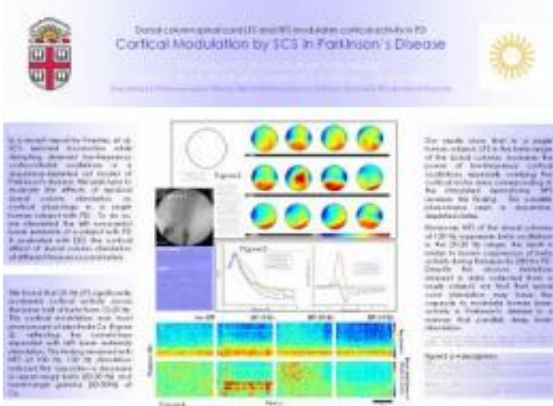


Spinal cord stimulation may benefit Parkinson's patients

June 14 2010



Ming Cheng, M.D, a neurosurgeon at Rhode Island Hospital, presents his findings on spinal cord stimulation and its potential ability to modulate Parkinson's disease symptoms at the 2010 American Society for Stereotactical and Functional Neurosurgery Biennial Meeting, June 14-16 in New York City. Credit: Rhode Island Hospital department of neurosurgery

A new study from Rhode Island Hospital indicates that spinal cord stimulation may be able to modulate Parkinson's disease symptoms. The lead author will present the findings at the 2010 American Society for Stereotactical and Functional Neurosurgery (ASSFN) Biennial Meeting, June 14-16 in New York City.

Ming Cheng, MD, is a [neurosurgeon](#) at Rhode Island Hospital and the lead author on an abstract called "Outcome of [Spinal Cord](#) Stimulation."

Other studies previously found motor function improvement with spinal cord stimulation (SCS) in an [animal model](#) of [Parkinson's disease](#) (PD). The findings from these studies prompted the researchers to test SCS on a single 82-year-old male with PD.

Cheng, who is also an assistant professor of neurosurgery at The Warren Alpert Medical School of Brown University, worked with colleagues at Brown to implant the SCS system and then test the effects at multiple frequencies while the patient was off medication.

"Our study shows no changes in pain assessment to control for reduction in pain as the reason for motor improvement," says Cheng. "What we did find is that low-frequency SCS produced a readily apparent and statistically significant worsening of Parkinson's disease symptoms." Cheng, who is also a physician with the Neurosurgery Foundation, Inc., continues, "These findings and locomotion 'walking time' were reversed at high stimulation frequencies."

This work has been replicated in a second patient, with similar results. Cheng notes that the results of the study are extremely limited as it was performed in only one patient; however, he believes that further studies are in order to determine the possible benefits of this approach for PD patients.

Provided by Lifespan

Citation: Spinal cord stimulation may benefit Parkinson's patients (2010, June 14) retrieved 27 April 2024 from <https://medicalxpress.com/news/2010-06-spinal-cord-benefit-parkinson-patients.html>

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