

# Neurologists testing century-old observation as a potential new treatment for Parkinson's disease

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(PhysOrg.com) -- More than one million Americans are living with Parkinson's disease, which slowly steals a person's control over their own body movements. Now, neurologists in the Movement Disorders Center at Rush University Medical Center have started a randomized, controlled pilot study to test a 100-year-old, non-invasive treatment developed by French neurologist, Jean-Martin Charcot, who is the most authoritative doctor of the 19th century for Parkinson's disease and other movement disorders.

During the mid-19th century Jean-Martin Charcot discovered patients with Parkinson's disease felt better after a lengthy carriage ride. Charcot theorized the shaking and vibrations caused by the bumpy cobblestone streets somehow eased [Parkinson's disease](#) symptoms.

To test the hypothesis, Charcot designed a non-invasive therapy using a shaking chair, which was called La Chaire Trépidante, to treat his patients. Reportedly, those who used the shaking chair had less pain and stiffness and improved sleep quality.

"What if you could treat someone with a devastating brain disease by shaking them," asked Dr. Christopher Goetz, director of the Movement Disorders Center at Rush and historical biographer of Charcot.

"More than a hundred years later, we are testing Charcot's observation to see if it really does improve symptoms of Parkinson's disease," said Goetz. "We want to see if his observation holds up to current gold standards of a randomized, controlled study."

Goetz, who is the lead investigator of the pilot study, and his team created a modernized vibrating chair that mimics the shaking chair developed by

Charcot. The new version of the shaking chair is a reclining chair cushion, which contains speakers that are connected to an amplifier and CD player. When the patient sits in the chair, soothing sounds and music are turned on and the acoustics from the CD are pumped through the speakers, which generate the strong vibrations.

In the current study, investigators are following a group of 20 Parkinson's patients. All study participants will have an initial assessment of their symptoms and disease status. Then, they will be randomly selected to receive music vibration therapy or music therapy alone over a certain period of time. Study participants will receive a vibratory chair to use at home during the study. Subjects will need to come to Rush for study visits and will need to keep diary records of their at home testing. The vibration study will also look at subject satisfaction and tolerability.

"Vibration therapy is currently used in diverse medical specialties ranging from orthopedics to urology to sports medicine," said Goetz. "This non-invasive treatment may be an effective adjunct therapy for some patients with Parkinson's disease."

To be eligible for the study, patients must have a diagnosis of idiopathic Parkinson's disease. Patients also have to be ambulatory and on stable medication for Parkinson's disease.

**More information:** For more information about the vibration study for Parkinson's disease at Rush, contact Theresa Chmura at 312-942-5008.

Provided by Rush University Medical Center

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