



St. Joseph's Hospital and Medical Center

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NEWS RELEASE

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Ali Parkinson Center Launches New Research Trial

Can exercise reduce the symptoms of Parkinson's disease?

Officials at the new Muhammad Ali Parkinson Center at Barrow Neurological Institute have announced the center's participation in a novel Parkinson's study aimed at determining the physical and neurological impact of simple exercise on Parkinson's patients. Participants' brains will be monitored to determine if increased physical activity actually helps protect the neurons in the brain from the disease.

The study, "Exercise training in Parkinson's disease: Neural and functional benefits", in partnership with Arizona State University is funded by the National Institutes of Health and begins as Ali, who has suffered from Parkinson's disease for more than 20 years, helped unveiled the new Parkinson's center at the Barrow Neurological Institute at St. Joseph's Hospital and Medical Center in Phoenix. The 10,000 square-foot center is the most comprehensive of its kind in the nation and double the size of the original center that first opened in 1997.

From its beginning, Ali and his wife, Lonnie, have wanted the focus of the center to be helping Parkinson's patients stay active and involved. This research study underscores that focus and passion. In conjunction with Arizona State University, researchers will test the participants who are aged 50-70. During the trial participants will follow a structured exercise program called "pole-striding", which is walking with ski-like poles.

"Until now we have had only anecdotal evidence that regular physical activity is disease modifying," says Darolyn O'Donnell, who will help lead the study at the center. O'Donnell explained that participants will undergo 12-weeks of pole-striding for three days a week as they walk for about 45 minutes during each training session. "One of the key elements of this study is that we are using a simple exercise that can be duplicated by anyone."

Narayanan Krishnamurthi is the researcher from the Center for Adaptive Neural Systems at ASU who has been instrumental in pushing this study forward. The project also involves collaboration with Sun Health Research Institute and the Banner Alzheimer's Institute.

Krishnamurthi says this 9-month project is unique because of its focus on brain imaging of the participants, as well as monitoring their physical symptoms. "Their brain activity will be monitored several times during the study to identify changes. We will be scanning all areas of the brain to see which areas are impacted by exercise," says Krishnamurthi. "From there, we can determine if the progression of Parkinson's disease can be slowed or even stopped by exercise."

During the exercise program, participants will be monitored and coached by staff members from the Muhammad Ali Parkinson Center. They will wear heart rate monitors and pedometers to measure the intensity of the training, but O'Donnell says the "beauty of using pole-striding as the

study's exercise is that this activity can be done by anyone in the country. You don't need to live in a big city or have expensive equipment."

The exercise portion of the trial is set to begin in January.

—St. Joseph's—

Barrow Neurological Institute at St. Joseph's Hospital and Medical Center in Phoenix, Arizona, is internationally recognized as a leader in neurological research and patient care. Established in 1962 Barrow treats patients with a wide range of neurological conditions, including brain and spinal tumors, cerebrovascular conditions, and neuromuscular disorders. Barrow Neurological Institute is consistently rated among the Top 10 best hospitals in the United States for neurology and neurosurgery by U.S. News and World Report.