

New MdDS Research Study at Ohio University

Neurological Responses to Transcranial Magnetic Stimulation in Subjects with MdDS



An innovative research study on the pathophysiology of Mal de Debarquement Syndrome (MdDS) will be conducted by [Brian C. Clark, PhD](#), at Ohio University. Dr. Clark is the Director of the ¹Institute for Neuromusculoskeletal Research in Athens, Ohio. Supported by a grant from the MdDS Balance Disorder Foundation², this pilot study is entitled, *Role of Intracortical Excitability in Mal de Debarquement Syndrome*.

MdDS manifests as a phantom perception of self-motion that often begins following a cruise or other motion experience. This sensation of motion is often associated with anxiety, fatigue, difficulty maintaining balance, unsteadiness, and difficulty concentrating (impaired cognitive function). Often, the abnormal perception of self-motion is relieved when riding in a car or participating in other motion experiences.

The cause of MdDS remains unknown; however, *most experts agree that the phantom perception of self-motion in MdDS originates in the brain*. In the planned studies at Ohio University, Dr. Clark and colleagues will investigate intracortical properties in MdDS patients using sophisticated neurophysiologic techniques including transcranial magnetic stimulation (TMS). Through the planned approach, motor cortical excitability will be determined and compared to that of age- and sex-matched control subjects.



In addition to the above, postural sway and assessment of vestibulosympathetic reflexes will be evaluated in all research subjects. Participants will be compensated for their time, but travel allowances are not included. IRB approval is pending; patient enrollment is anticipated to begin in early 2011.

If you have a confirmed diagnosis of Mal de Debarquement Syndrome and are interested in participating in this research study, Dr. Clark can be contacted by email at clarkb2@ohio.edu or by phone at 740-593-2354.



This research will be performed at:

[Ohio University](#)

Irvine Hall- 210 East Wing
Athens, OH 45701-2979

¹The [Institute for Neuromusculoskeletal Research](#) facilitates multidisciplinary neuromusculoskeletal research designed to improve the diagnosis, treatment, and prevention of diseases and injuries of the neuromusculoskeletal system.

²The [MdDS Balance Disorder Foundation](#) is an international, all-volunteer organization which operates as a PA non-profit 501(c)(3) corporation. The Foundation is dedicated to improving MdDS awareness and biomedical research studies designed to improve the diagnosis, treatment, and prevention of this rare and poorly understood disorder of perceived motion.