A randomized controlled pilot study of TMS enhancement of associative memory networks in healthy subjects and epilepsy patients.

About the study:

We are conducting a research study with people (ages 18-40) to explore how Transcranial Magnetic Stimulation (TMS) using the MagStim Rapid 2 device may be used to help memory difficulties in patients with Epilepsy. TMS uses a magnetic field to briefly excite the brain in a certain area. It is currently unknown if TMS, when applied to areas of the brain responsible for memory, will help people with memory difficulties. Because its affects on memory are unknown, the TMS device is not approved by the Food and Drug Administration (FDA) for therapies to help aid with memory, however it is an FDA approved device for depression and bodily nerve stimulation.

What would I have to do?
This study will involve 15 visits over a 4 to 6 week period. Both healthy individuals, and people who have epilepsy will participate in this study.

During this study, you will undergo Functional Magnetic Resonance Imaging (fMRI) to take images of your brain, TMS stimulation, and EEG testing to measure your brain activity. The TMS machine will be positioned over the area of the brain that will be stimulated (as shown in the picture). You will also be asked to complete some memory and thinking tests and provide a detailed medical history.

You will be compensated $15 per hour.

Contact information

This research will be conducted at NYU School of Medicine, through the NYU Comprehensive Epilepsy Center. The NYU Principal Investigator will be Anli Liu MD and Co-Principal Investigator is Heath Pardoe PhD. Co-Investigators include Daniel Friedman MD, Ruben Kuzniecky MD and Orrin Devinsky MD.

For more information, please email NYUsleepstudy@gmail.com

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