

DEEP TMS RESEARCH STUDY

The Johns Hopkins Brain Stimulation Program is part of a multicenter international research study evaluating a novel form of TMS, deep TMS (dTMS). The dTMS study is intended for people suffering from major depressive disorder (MDD) who have been treated unsuccessfully with antidepressants. dTMS, as the name suggests, is designed to stimulate deeper areas of the brain using an H-Coil as opposed to the figure-of-8 coil used with standard rTMS. The H-coil is designed to stimulate neuronal pathways related to the control of motivation, reward and pleasure.

Who can join?

Males and females aged 22-68 years old suffering from major depression who have not been responding to or do not tolerate antidepressant medication may participate in this outpatient study. Females cannot be pregnant or breast-feeding.

In addition, patients who are suffering from psychosis, co-morbid anxiety, personality or substance use disorders, or dysthymia have been found to be unlikely to respond to TMS and will be excluded from participating in this study.

People who have failed to respond to ECT or who have had a history of treatment with rTMS, Vagus Nerve Stimulation, or Deep Brain Stimulation cannot participate.

The risk of seizures with TMS is of serious concern. Because of this, people at increased risk for seizure, such as those with a personal or family history of seizures, will not be allowed to participate. In addition, anyone with a history of having any metal in the head (except in the mouth) or anyone with implanted electrical devices such as pacemakers or neurostimulators cannot participate.

What does the study entail?

Before enrollment into the study, a two-week screening evaluation, which includes medical interviews and safety assessments, must take place. During these two weeks, potential participants will need to be gradually taken off their medications and are advised to discuss this with their psychiatrist before deciding to take part in the study. After screening is completed and participants are enrolled, each person will be randomly assigned to receive either active or inactive (sham) dTMS. Therefore, active dTMS is not guaranteed.

The study itself spans 16 weeks of active or inactive dTMS for a total of 44 sessions. For the first four weeks, dTMS (real or sham) is given 5 times a week and then twice a week for 12 weeks. 12 weeks after the last dTMS administration, there will be a follow-up visit.

For more information or to see if you qualify, call 410-614-1732 or e-mail jgallegos@jhu.edu.
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