

TMS TRENDS

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NEW BLOOD TEST MAY HELP DIAGNOSE DEPRESSION

Created by researchers at the Northwestern University, a new blood test has been developed to detect depression in individuals. Specifically, the test measures blood levels of nine different RNA molecules, which differ between healthy and depressed individuals.

Though the study published in *Translational Psychiatry* has been used in only a small sample of people, researchers hope that in the future it could be used on a widespread basis. Besides accurately diagnosing depression, the technique may also be able to tell who could benefit from psychotherapy and who may be vulnerable to the condition in the first place.

Researchers recruited 32 patients who were diagnosed with Major Depressive Disorder, as well as 32 non-depressed patients to serve as controls. After 18 weeks of cognitive behavior therapy for the depressed patients, researchers were able to highlight markers in the patients and determine which ones were responding well to therapy by assessing physical changes in their blood tests. After the period of therapy sessions ended, about 40 percent of the patients were no longer depressed. The researchers noted that the patients who recovered had a unique “fingerprint” of RNA levels in their blood. This suggests that the test might be able to inform who could benefit from this form of treatment.

The blood test is still a long way from clinical usefulness, but it represents the first objective measurement of a mental disorder in adults. The development of this blood test suggests that it eventually may be possible to test for severity of depression or direction of treatment on the types of biomarkers that are highlighted on the test.

LONG-TERM BENEFIT OF TMS THERAPY IN DEPRESSION

The results of a recent multi-site study designed to assess the long-term effectiveness of NeuroStar TMS Therapy was published in *The Journal of Clinical Psychiatry*. The multi-site study used adult patients with Major Depressive Disorder (MDD) who had failed to benefit from prior treatment with antidepressant medication.

The study found that TMS treatment with the NeuroStar TMS Therapy System induced a positive response and remission in patients with treatment resistant MDD during the acute phase of therapy, which were maintained through one year of follow-up. At the end of acute treatment, 62 percent of patients achieved symptomatic improvement while 41 percent reported complete remission. At 12 months, 68 percent of patients achieved symptomatic improvement while 45 percent reported complete remission. Maintenance of benefit was observed under a post-treatment regimen, which included continued antidepressant medication and follow-up TMS sessions for symptom recurrence.

HORIZON BLUE CROSS BLUE SHIELD COVERAGE

Effective December 24, 2014, access to repetitive transcranial magnetic stimulation (rTMS) will now be available to approximately 3.7 million Horizon BC/BS subscribers in New Jersey. Members living outside New Jersey may also have benefits for TMS.

Medical Policy #104

TMS as a treatment for Depression and Other Psychiatric/Neurologic Disorders