
TMS Therapy offers adults with depression new treatment option

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Summary:

TMS is a non-invasive method of treating depression for adults. The treatment uses magnetic pulses to stimulate nerve cell activity in the area of the brain that regulates mood. Lindner Center of HOPE is the first provider in Ohio to treat patients using TMS.

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A new medical treatment that sends magnetic pulses to the brain has been found effective for some people battling major depression. Studies show the treatment might also be effective in reducing migraine headaches and with helping stroke victims regain mobility and use of motor skills.

Transcranial Magnetic Stimulation (TMS) treatment uses magnetic pulses to stimulate nerve cells in the brain. It is a non-invasive outpatient treatment, meaning that it doesn't require anesthesia, surgery or recovery time in a hospital. Previous studies have shown as much as a 50 percent reduction in depression symptoms by patients using TMS therapy.

TMS therapy is approved by the Federal Drug Administration (FDA) for use on adult patients who have tried antidepressant medication but failed to see any results. TMS treatment is currently offered by a few select providers throughout the country and is not yet routinely covered by health insurance plans.

How TMS therapy works

TMS therapy is administered by placing a treatment coil lightly against the scalp of a patient while they sit in a reclining chair. The coil then emits magnetic fields directly to the portion of the brain involved with mood regulation. Small electrical currents are produced by the magnetic fields. The currents proceed to alter cell activity in the brain, which is thought to be effective in reducing depression symptoms.

TMS treatment lasts about 40 minutes a session, with patients fully awake during the process. Patients typically have five weekly treatments over a six week period. The most common side effect associated with treatment during clinical trials was scalp pain or discomfort – generally mild to moderate.

Studies have found most TMS patients respond best to treatments of 40 consecutive magnetic pulses to the brain over a four second period twice a minute. However, duration, frequency and the number of pulses received per session depend upon the doctor's assessment of how the patient responds to the treatment.

Lower depression relapse rates

Two recently-released studies suggest patients with major depression were less likely to relapse following TMS treatment compared to medication or electroconvulsive therapy (ECT).

The studies found only 10 to 12 percent of patients whose depression initially went into remission following TMS treatment experienced relapse. The TMS results sharply contrast to the 40 percent relapse rate experienced by patients achieving remission in a study on anti-depression medication, a statistic similar to relapse rates experienced by ECT patients.

The two independently conducted TMS studies were presented this spring during the American Psychiatric Association meeting. Both studies were open to patients who failed previous antidepressant therapies.

One of the studies allowed patients who had noticeably experienced changes in their depression symptoms for two straight weeks to receive booster treatments. Nearly 85 percent of patients receiving booster treatments experienced some degree of reduction in their depression.

A third study presented at the meeting found over half of its participants saw at least a 50 percent improvement in their depression following TMS treatment after failing to see significant progress from at least two previous antidepressant therapies. Depression remission was experienced by 24 percent of the patients. Booster treatments were used to some degree in the study as well.

Reference:

Gever, John. "APA: Lasting Benefit Seen for TMS in Depression."
<http://www.medpagetoday.com/MeetingCoverage/APA/20398>