Medical Xpress

Brain stimulation no better than escitalopram for depression

June 29 2017

(HealthDay)—Escitalopram may outperform transcranial direct-current

stimulation (tDCS) in the treatment of depression, according to a study published in the June 29 issue of the *New England Journal of Medicine*.

Andre Brunoni, M.D., Ph.D., director of the Service of Interdisciplinary Neuromodulation at the University of Sao Paulo in Brazil, and colleagues randomly assigned 245 patients with depression to one of four groups. One group had tDCS plus a placebo pill, another had sham tDCS plus escitalopram. The third group had tDCS plus escitalopram, and the final group had sham tDCS plus a placebo. The treatment was given for 15 consecutive days at 30 minutes each, then once a week for seven weeks. Escitalopram was taken daily for three weeks, after which the daily dose was increased from 10 to 20 mg for the next seven weeks.

After 10 weeks, patients receiving tDCS fared no better than those taking escitalopram. Patients receiving tDCS, however, experienced more side effects, the researchers found. Specifically, patients receiving tDCS had higher rates of skin redness, ringing in the ears, and nervousness than those receiving sham brain stimulation. In addition, two patients receiving tDCS developed new cases of mania. Patients taking escitalopram reported more frequent sleepiness and constipation.

"tDCS has been increasingly used as an off-label treatment by physicians," Brunoni told *HealthDay*. "Our study revealed that it cannot be recommended as a first-line therapy yet and should be investigated further."

More information: Abstract/Full Text (subscription or payment may be required)
Editorial (subscription or payment may be required)