Transcranial direct current stimulation promising for bipolar

January 5 2018

(HealthDay)—Transcranial direct current stimulation (tDCS) appears to
be effective and safe as an add-on intervention for adults with bipolar depression, according to a study published online Dec. 27 in *JAMA Psychiatry*.

Bernardo Sampaio-Junior, M.D., from the University of São Paulo in Brazil, and colleagues determined the efficacy and safety of tDCS as an add-on treatment for bipolar depression in a randomized trial conducted in an outpatient setting. Fifty-nine adults with type I or type II bipolar disorder in a major depressive episode and receiving a stable pharmacologic regimen were included in the study; participants had 17-item Hamilton Depression Rating Scale scores above 17. Participants underwent 10 daily 30-minute active or sham tDCS sessions and then one session every two weeks until week 6.

The researchers found that patients in the active tDCS condition showed significantly superior improvement compared with those receiving sham treatment ($\beta_{int} = -1.68; P = 0.01$). In the active versus the sham condition, the cumulative response rates were higher (67.6 versus 30.4 percent; $P = 0.01$), but the remission rates were not significantly higher (37.4 versus 19.1 percent; $P = 0.18$). The groups had similar adverse events, including treatment-emergent affective switches, except for localized skin redness, which was higher in the active group (54 versus 19 percent; $P = 0.01$).

"In this trial, tDCS was an effective, safe, and tolerable add-on intervention for this small bipolar depression sample," the authors write. "Further trials should examine tDCS efficacy in a larger sample."

Two authors disclosed financial ties to the pharmaceutical and medical device industries.

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