

Comments on “Efficacy of Transcranial Direct Current Stimulation in the Treatment: Resistant Patients Who Suffer from Severe Obsessive-compulsive Disorder”

Sir,

Najafi *et al.*^[1] described a nonblind, uncontrolled evaluation of 15 once daily, 5 per week sessions of transcranial direct current stimulation (tDCS) in 42 patients with severe, treatment-resistant obsessive-compulsive disorder (OCD). We urge that readers view their results with considerable caution.

The authors did not provide a complete operational definition of treatment resistance. They did not describe the clinical characteristics of the sample. They did not provide information about concurrent medications during and after the tDCS course. Their description of electrode positioning in the 10–20 electroencephalography system does not correspond with the anatomical sites they named. Their description of the inferential statistical procedures suggests that they had difficulties with interpreting the analysis. Unusually, there were no dropouts from among 42 patients in a 3-week trial with daily sessions and a 3-month follow-up.

Finally, they obtained results that are at considerable variance with clinical experience. OCD is hard to treat, and an adequate clinical trial is suggested to require 2–3 months; attenuation of OCD ratings by 25%–35% is commonly set as the threshold for response.^[2-4] Yet, Najafi *et al.*^[1] found that the sample as a whole showed >50% response in just 2 weeks and >75% improvement at a 3-month follow-up. In fact, at the final assessments, the patients were almost in remission, a rare event in OCD research.^[2-4]

Such dramatic outcomes are especially difficult to understand because tDCS is a mild treatment that does not stimulate or inhibit the underlying cerebral cortex; it is merely a neuromodulator that facilitates or inhibits depolarization of the underlying cortex.^[5,6] In this context, it must be recognized that OCD is believed to more involve not the cortex but subcortical structures such as the thalamus and basal ganglia and associated subcortical neurocircuits;^[7,8] these are poorly targeted by tDCS.^[5,6]

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Conflicts of interest

There are no conflicts of interest.

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