





BIPOLAR DISORDERS Factsheet

November 2021

What is Transcranial Direct-Current Stimulation (tDCS)?

tDCS is a non-invasive form of brain stimulation similar to transcranial magnetic stimulation, but instead of using magnets, it uses a low-intensity, constant current applied through scalp electrodes. Generally, anodal stimulation induces an increase of cortical excitability, whereas cathodal stimulation decreases cortical excitability, with effects that last beyond the stimulation period. Dose involves current intensity, duration of stimulation and size of electrodes. The use of tDCS in bipolar disorder is in the early stages of investigation for relief of symptoms in people who are not satisfied with their response to medication.

What is the evidence for tDCS?

Moderate quality evidence finds no differences between active and sham tDCS fin the rates of treatment-emergent mania or hypomania. We found no reviews that assessed tDCS for symptom improvement.



NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about bipolar disorder or its treatment with your doctor or other health care provider.

For more information see the technical table

HOW YOUR SUPPORT HELPS

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