Transcranial direct current stimulation (tDCS) is a minimally invasive form of brain stimulation that uses direct electrical current to alter cortical excitability. During this process, a weak, direct electrical current (1 to 2 mA) is applied using scalp surface electrodes. Anodal stimulation increases cortical excitability and cathodal stimulation decreases it. The changes in cortical excitability probably arise from the depolarization and hyperpolarization of neurons.\(^1\) Interest in this treatment modality had begun way back in the 1960s but gradually waned. Renewed interest began emerging in the 1990s following spurt in neuromodulation research using transcranial magnetic stimulation (TMS). Based on the theory of hypoactivity in left prefrontal cortex in depression, anodal tDCS has been applied to the left hemisphere to increase activity and cathodal tDCS to the right hemisphere to decrease activity in order to resolve depression. Several open label and randomized controlled trials have been conducted to examine the efficacy of tDCS in treating major depression some of which have yielded positive results.\(^2,3,4\) tDCS has also been tried in Parkinson’s disease, schizophrenia, post traumatic stress disorder and substance use.\(^5,6,7\) tDCS is a cheap and non-invasive technique with minimal side effects like headache and itchiness and redness at the site of stimulation. It will require few years of systematic research to find out whether tDCS emerges as a cheap, non-invasive and above all, effective method for treatment of psychiatric disorders or it goes into oblivion as another “fancy” brain gadget!

REFERENCES


EDITORIAL
SUJIT SARKHEL

ORIGINAL ARTICLES
Attempted Suicide : The Process of Change Through Therapy ........................................... 1
RAJLAKSHMI GUHA, MALLIKA BANERJEE
MALAY GHOSHAL
Stigma Experienced by Primary Care Givers of Persons with Epilepsy and Mental Illness : A Comparative Study .......................................................... 7
KAMLESH KUMAR SAHU, ARVIND KUMAR
SUDESHNA BASU MUKHERJEE, SOMA SAHU, A. N. VERMA

REVIEW ARTICLES
Dialectical Behaviour Therapy : Overview, Origin, Philosophy and Mediators of Therapeutic Change : Dialectical and Core Strategies .................................................. 18
RUDRANI CHATTERJEE, SANJUKTA DAS

VIEW POINT
Selective Serotonin Reuptake Inhibitors (SSRIs) and Suicide in Children and Adolescents – The Debate goes on .......................................................... 28
SANJAY GARG

CASE REPORT
Assaulting the Psychiatrist : A Rare Case of Fregoli syndrome ........................................... 31
RAJARSHI GUHA THAKURTA, SHARMILA SARKAR
ASHIS DEBNATH, SUKHENDU MONDAL

CME
Antidepressant Induced Hyponatremia .................................................................................... 34
RUDRAPRASAD ACHARYA