

effective and a safe treatment option and have expressed their wish to improve their theoretical and practical competencies in ECT.

Conclusions: ECT is a standard treatment and a therapeutic mainstay in psychiatry but is being less performed in some countries. Early career psychiatrists lack experience with ECT but are interested in training opportunities. Future actions are needed for the improvement of education and training in ECT.

Disclosure of Interest: None Declared

EPV0862

Transcranial magnetic stimulation for catatonia: case series

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doi: 10.1192/j.eurpsy.2023.2164

Introduction: Catatonia is diagnosed in 5–43% of patients with various mental disorders, thus actualizing the problem of elaborating therapeutic interventions for catatonia on an outpatient basis. Although the current experience in application of transcranial magnetic stimulation (TMS) in catatonia is limited, it provides promising data on positive effect of dorsolateral prefrontal cortex (DLPFC) stimulation in a series of clinical observations. According to the available data, TMS shows comparable efficacy with electroconvulsive therapy, but unlike it is safe and does not require general anesthesia in intensive care unit.

Objectives: to evaluate the efficacy and safety of TMS in the treatment of catatonia in patients with mental disorders

Methods: Four patients were diagnosed with catatonia as part of schizophrenia spectrum disorders in three cases (P1,4,7) and in one case within the structure of recurrent depression phase (P8). Psychopathological examination includes PANSS, SAS, NSA-4, BFCRS, NCRS, and BACS.

Personalized choice of stimulation protocol was determined by rCBF lateralization in DLPFC reflecting the neuronal activity in that region: 1) P1, P4, and P8 underwent 20 sessions of high-frequency stimulation at the frequency of 20 Hz with the amplitude of 120% MT in the projection of left DLPFC 2) P7 underwent 20 sessions of low-frequency stimulation at the frequency of 1 Hz with the amplitude of 120% MT in the projection of right DLPFC
Results: Safety evaluation was performed daily during TMS sessions. None of participants reported any adverse events at high compliance.

The efficacy was estimated during by the following criteria: 1) positive clinical response: decline of BFCRS and NCRS scores by 70% from the primary evaluation 2) achievement symptomatic remission (total BFCRS and NCRS score 3 and less).

Positive clinical response was detected in all four patients, however, symptomatic remission was formed only in two of them (P1 and P4) referring to BFCRS.

Evaluation of neurotransmitter concentration: P1, P7, P8 showed a tendency for absolute and relative glutamate concentration values to approach normal. After the TMS course GABA concentration

diminished in all cases but P4, in whom the elevation of GABA level was registered.

Conclusions: TMS potentially activates metabolic processes in brain tissues, thus promoting deceleration of pathological mechanisms and potentiating neuroplasticity with procognitive effect, expressed primarily in the increase of processing speed and response to it, as well as in the improvement of working memory. To summarize, the influence of TMS on local brain regions makes it possible to achieve a positive clinical effect in treatment of catatonia.

No strong and unequivocal results were received for the efficacy of TMS in treatment of catatonia. A positive clinical effect was seen, however, insufficient for achieving remission in the majority of subjects.

Disclosure of Interest: None Declared

EPV0863

The Application of Deep Brain Stimulation for Treatment-Resistant Depression – A Narrative Review

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doi: 10.1192/j.eurpsy.2023.2165

Introduction: Depression continues to be a leading cause of disability worldwide. Despite the availability of several classes of antidepressants, a third of patients do not recover from their depression. Deep brain stimulation (DBS) is an invasive treatment approach that was found to be effective in the treatment of Parkinson's Disease and presents as an alternative to standard antidepressant therapy for people with treatment-resistant depression (TRD).

Objectives: We aimed to compare the use of DBS to standard antidepressant therapy and decipher whether DBS can be used for TRD. In addition, electroconvulsive therapy (ECT), a current brain stimulation method administered for TRD, was contrasted with DBS.

Methods: A narrative review of the current literature concerning DBS application and TRD was conducted to evaluate whether standard antidepressant therapy was as effective as psychosurgical intervention. Emphasis on TRD-associated DBS was noted.

Results: The studies discussed found that DBS was an effective treatment option for TRD, however, the results were limited due to the studies being conducted in small sample sizes and using DBS in combination with antidepressant therapy. Nonetheless, the concomitant use of DBS and antidepressants demonstrated to be an effective treatment for TRD, highlighting the potential benefit of DBS in inducing remission in TRD. DBS has a wider range of complications compared to ECT as it involves a more invasive neurosurgical approach to implant the device. On comparing the cost of the devices between the 2 studies, DBS costs approximately three times more than ECT.

Conclusions: The spectrum of depressive disorders is known to affect multiple regions of the brain. A more cohesive approach