

EPP243

Risk of cognitive disorders and cardio-cerebrovascular diseases after electroconvulsive therapy in patients with affective and psychotic disorders

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Introduction: Although electroconvulsive therapy (ECT) is one of the most important treatments for major mental disorders, many patients are concerned about the risk of developing cognitive impairment or cardio-cerebrovascular disease after ECT.

Objectives: This study aimed to compare the incidence of cognitive disorders and cardio-cerebrovascular diseases in the ECT group and the control group at a university hospital.

Methods: The subjects of this study were the ECT group (n = 173 people) who received ECT in patients with major affective or psychotic disorders, and the control group (n = 11,444 people) who did not receive ECT. The ECT and control groups were matched for demographic and clinical characteristics in a 1:5 ratio. This study investigated the incidence of cognitive disorders and cardio-cerebrovascular diseases through retrospective follow-up for up to 5 years after ECT. Statistical analysis used a multivariate Cox proportional hazards model to obtain the hazard ratio (HR) and 95% confidence interval (CI).

Results: The incidence rates per 1,000 patient-years in the ECT vs. control groups were 17.56 vs. 6.25 for cognitive disorders, 4.41 vs. 4.35 for cardiovascular diseases, and 2.28 vs. 2.48 for cerebrovascular diseases. The ECT group tended to have a higher incidence of cognitive disorders compared to the control group, but this was not statistically significant (HR, 2.46; 95% CI, 0.89–6.36; p=0.07). There was no significant difference in the risk of cardiovascular disease (HR, 1.50; 95% CI, 0.21–7.09; p=0.65) or cerebrovascular disease (HR, 0.96; 95% CI, 0.05–6.56; p=0.97) between the two groups.

Conclusions: This study showed that there were no significant differences in the incidence of cognitive disorders and cardio-cerebrovascular diseases between patients with major affective or psychotic disorders who received ECT and those who did not. This study suggests that ECT is a safe treatment, but further prospective multicenter collaborative follow-up studies are required to confirm this.

Disclosure of Interest: None Declared

EPP244

Transdiagnostic Effectiveness of Repetitive Transcranial Magnetic Stimulation for Mood and Anxiety Disorders

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Introduction: Repetitive Transcranial Magnetic Stimulation (rTMS) is a novel neuromodulation treatment investigated for multiple

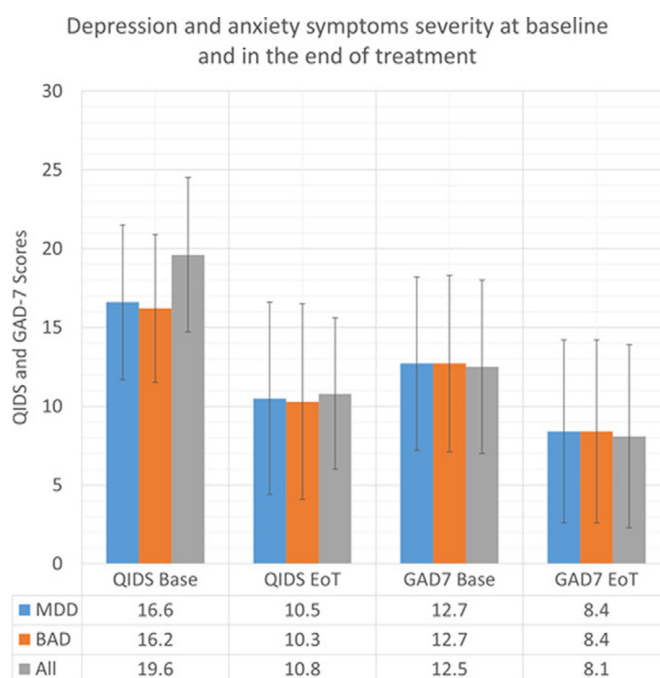
psychiatric conditions and approved primarily for treatment-resistant depression (TRD) [1, 2]. There is a perceived potential for other clinical conditions, primarily other mood and anxiety disorders [2]. We have been using rTMS for treatment of patients with TRD of mixed etiology and multiple comorbidities.

Objectives: To evaluate the effectiveness and feasibility of rTMS in complex clinical populations.

Methods: Observational study. Quick Inventory of Depressive Symptomatology (QIDS). Generalized Anxiety Disorder Questionnaire (GAD-7). Descriptive statistics.

Results: We have treated 90 patients, 46 women (51.1%) and 44 men (48.9%), with average age of 42.5±16.9 years. Vast majority (88.9%) of patients had a primary diagnosis of major depressive disorder, 8.9% had bipolar depression, and two patients had primary anxiety disorders. The standard questionnaires were used to quantify the severity of depressive symptoms (QIDS) and anxiety (GAD-7). The average baseline scores for depression and anxiety were 16.6±4.9 and 12.7±5.5, respectively. The patients received an average of 24.0±7.0 treatments. Almost all patients received the full course of 20-30 treatments as planned. The average end-of-treatment (EoT) scores for severity of depressive symptoms and anxiety were 10.5±6.1 and 8.4±5.8, respectively. The rates of improvement and complete resolution of depressive symptoms were 64.4% and 28.7%, respectively. The rates of improvement and complete resolution of anxiety symptoms were 53.5% and 29.6%, respectively. There was a significant difference between the bipolar and major depression in terms of baseline depressive symptoms severity and improvement rates, but there was no difference in respect to anxiety symptoms (see Figure 1).

Image 1:



Conclusions: rTMS provides significant improvement and recovery rates in complex clinical populations and is well-tolerated. We recommend wider implementation of rTMS for treatment of mood and anxiety disorders.