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Archives
of
CLINICAL
NEUROPSYCHOLOGY

Archives of Clinical Neuropsychology 34 (2019) 860–1099

Abstract

Poster Session B

Thursday, November 14, 2019 11:30 am – 1:00 pm

NEUROLOGICAL AND NEUROPSYCHIATRIC DISORDERS: PSYCHIATRIC ILLNESS

B-36

Effects of Electroconvulsive Therapy on Cognitive Performance and Depressive Symptoms: A Naturalistic Study

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Objective: 1) Examine the short- and long-term effects of electroconvulsive therapy (ECT)—conducted in a naturalistic treatment setting—on objective and subjective cognitive functioning. 2) Examine the long-term effects of naturalistic ECT on depressive symptoms. Method: Participants (N = 108) were outpatients (aged 18-65) diagnosed with a Major Depressive Episode who received ECT at St. Joseph's Healthcare Hamilton, Ontario. Parameters of ECT varied clinically. Participants completed a cognitive and psychological test battery at baseline (n = 108), mid-treatment (n = 82), 2–6-weeks post-ECT (n = 52), 6-months post-ECT (n = 24), and 12-months post-ECT (n = 14) that included Repeatable Battery for Assessment of Neuropsychological Status (RBANS), Squire Subjective Memory Questionnaire (SSMQ), Beck Depression Inventory-II (BDI-II), and WHO Disability Assessment Schedule (WHODAS-2). Results: Overall cognitive performance (total RBANS scaled scores) did not improve from baseline to 2-6 weeks post-ECT ($p = 0.156$), significantly improved from baseline to 6-months post-ECT ($t(22) = -2.34$, $p = .026$, CI: = -8.93– -0.63), but were not maintained at 12-months post-ECT ($p = 0.20$). SSMQ scores significantly worsened from baseline to mid-ECT ($t(75) = -5.04$, $p < .001$, CI: -17.53– -7.60), but returned to baseline levels by 2–6-weeks post-ECT. Depressive symptoms (BDI-II) significantly improved by the 4th ECT session and gains were maintained across all timepoints ($p < 0.004$). WHODAS-2 scores significantly improved from baseline and were maintained across follow-up ($t < 0.05$). Conclusion: ECT was effective at improving depressive symptoms in a naturalistic setting with diverse patient presentations. Preliminary findings show minimal, if any, gains in cognitive performance–although, functioning did not appear to worsen following ECT. RBANS may not be sufficiently sensitive. Developing recommendations for conducting and evaluating ECT in naturalistic settings marks an essential next step.

doi:10.1093/arclin/acz034.119