ID: 44269 - Cognitive Outcome in Adolescents Treated with Electroconvulsive Therapy

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**Extended Abstract:**
Objectives A retrospective chart review to compare pre- and post-neuropsychological test performance in adolescents between the ages of 11 and 18 years who were treated with electroconvulsive therapy (ECT) for a severe and/or a treatment-resistant psychiatric disorder.

Methods IRB approved this study. 45 patients (31 female; 68.9%) aged 18 and younger at the time of starting ECT (median: 15.89 ± 1.48 years) were identified.

Results The most common diagnosis among 40 (89%) of the patients was Major Depressive Disorder. The mean number of ECT treatments in the index course was 20.18 ± 10.84, and the mean number in the continuation treatment was 8.56 ± 9.30. The mean interval between post-ECT treatment and the date of neuropsychological evaluation was 70.48 days. Neuropsychological domain scores were computed and analysis showed no significant decline in intelligence, academic achievement, learning and memory, executive functioning, or motor speed. Objective ratings of depression measured by the Beck Depression Inventory also were reduced.
(p = 0.003) at the post-ECT time-point relative to pre-ECT (declined from ‘severe’ to ‘moderate’).

Conclusions Using standardized neuropsychological evaluation, adolescents treated with ECT did not display significant declines in a range of neurocognitive domains that were examined. Reduction in self-reported depression symptoms were found, although ratings were still within clinical ranges.

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