

Effects of Bilateral Electroconvulsive Therapy on Autobiographical Memories in Asian Patients

Authors : Lai Gwen Chan, Yining Ong, Audrey Yoke Poh Wong

Abstract : Background. The efficacy of electroconvulsive therapy (ECT) as a form of treatment to a range of mental disorders is well-established. However, ECT is often associated with either temporary or persistent cognitive side-effects, resulting in the failure of wider prescription. Of which, retrograde amnesia is the most commonly reported cognitive side-effect. Most studies found a recalling deficit in autobiographical memories to be short-term, although a few have reported more persistent amnesic effects. Little is known about ECT-related amnesic effects in Asian population. Hence, this study aims to resolve conflicting findings, as well as to better elucidate the effects of ECT on cognitive functioning in a local sample. Method: 12 patients underwent bilateral ECT under the care of Psychological Medicine Department, Tan Tock Seng Hospital, Singapore. Participants' cognition and level of functioning were assessed at four time-points: before ECT, between the third and fourth induced seizure, at the end of the whole course of ECT, and two months after the index course of ECT. Results: It was found that Global Assessment of Functioning scores increased significantly at the completion of ECT. Case-by-case analyses also revealed an overall improvement in Personal Semantic and Autobiographical memory two months after the index course of ECT. A transient dip in both personal semantic and autobiographical memory scores was observed in one participant between the third and fourth induced seizure, but subsequently resolved and showed better performance than at baseline. Conclusions: The findings of this study suggest that ECT is an effective form of treatment to alleviate the severity of symptoms of the diagnosis. ECT does not affect attention, language, executive functioning, personal semantic and autobiographical memory adversely. The findings suggest that Asian patients may respond to bilateral ECT differently from Western samples.

Keywords : electroconvulsive therapy (ECT), autobiographical memory, cognitive impairment, psychiatric disorder

Conference Title : ICCPN 2018 : International Conference on Cognitive Psychology and Neuropsychology

Conference Location : Tokyo, Japan

Conference Dates : May 28-29, 2018