



**ORIGINAL RESEARCH PAPER**

**Psychiatry**

**ELECTROCONVULSIVE THERAPY (ECT) IN REFRACTORY OBSESSIVE COMPULSIVE DISORDER (OCD)-WHERE DO WE STAND?**

**KEY WORDS:** OCD, Symptoms, ECT.

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**ABSTRACT**

Obsessive-compulsive disorder (OCD) is characterized by recurrent persistent, ruminative thoughts, images or ideas and ritualistic compulsive behaviors. Electroconvulsive Therapy (ECT) as a treatment modality for the same has shown good results in some case reports and series. Still, there are is literature stating ECT worsening OCD symptoms in some patients. Thus, broader study with large sample size will be helpful in establishing anti-obsessional effect of ECT.

**INTRODUCTION**

Obsessive-compulsive disorder (OCD) is a chronic psychiatric disorder characterized by recurrent persistent, ruminative thoughts, images or ideas and ritualistic compulsive behaviors that cause major dysfunction in different domains of life <sup>[1]</sup>. Currently, cognitive-behavioral therapy and selective serotonin reuptake inhibitors are considered first-line treatments of OCD. Prior studies have reported that 25%-40% of patients have persisting signs and symptoms of the disease and dysfunction even after adequate treatment <sup>[2]</sup>. In a few case reports, electroconvulsive therapy (ECT) has shown better outcome in refractory of OCD <sup>[3-5]</sup>. Still, evidence regarding the role of ECT in OCD is insufficient <sup>[6]</sup>.

**DISCUSSION**

Reports of ECT in the treatment or refractory OCD is not adequate. In a cohort of nine patients in an open label study, mild improvements in OCD occurred following ECTs <sup>[7]</sup>. In a review of 32 subjects it was reported that there was significant improvement in refractory OCD and associated mood features <sup>[8]</sup>. There are reports of maintenance ECT for OCD refractory to Tricyclic Antidepressants (TCAs) <sup>[9]</sup>. Most of the subjects had comorbid depression. Basal ganglia is mostly involved in OCD <sup>[1]</sup>. As one of the proposed mechanism of actions, ECT has been shown to downregulate serotonergic, dopaminergic and GABA receptors in basal ganglia and restore the balance between direct and indirect pathway whose imbalance is the core of OC spectrum illnesses <sup>[3,4]</sup>. The definition of treatment resistance in these studies was taken as resistance to tricyclics or a few SSRIs, and none of the newer SSRIs and modalities like Deep Brain Stimulation (DBS), Transcranial Magnetic Stimulation (rTMS) were used. So, it hard to establish an independent anti-obsessional effect for ECT.

**CONCLUSION**

ECT is an excellent treatment modality in acute and chronic psychiatric manifestations for rapid relief of symptoms. OCD and the other disorders in its spectrum, when present chronically cause significant impairment in quality of life of both patients and the caregivers. ECT as a treatment modality for the same has shown promising results. However, there are handful literature stating ECT worsening OCD symptoms too. Thus, broader study with large sample size and proper standardization will be helpful in proving or disproving the anti-obsessional effect of ECT.

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