

ECT for Major Depression Disorder in a Geriatric Patient with Multiple Sclerosis, A Case Report

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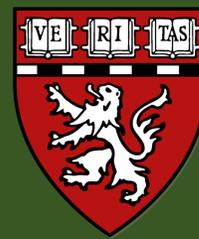
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BACKGROUND:

- Electroconvulsive therapy (ECT) has been well studied for treating Major Depression Disorder (MDD), however data regarding its safety and efficacy in patients with Multiple Sclerosis (MS) is limited.
- Here, we present the first known geriatric patient (age >65) whose depression from worsening MS was safely and efficaciously treated with ECT.

CASE:

- Patient is a 71yo female with PMH significant for MS who presented w/ severe recurrent MDD and passive suicidal ideations (SI) that had worsened in the context of declining mobility and increasing muscle weakness.
- Medications: Alprazolam 1mg po qhs, Doxepin 0.3 mg po qhs, and furosemide 20mg po qdaily.
- MRI was ordered for ECT clearance and showed a “slight increase in ventricle size and number of demyelinating foci” since her prior MRI in 2010, indicating disease progression over the past 9 years.
- ECT stimuli were delivered unilaterally by a Thymatron Tm, to minimize cognitive side effects. Seizure durations ranged from 30 -65 seconds.
- She received a total of 8 ECT treatments with significant improvement in the patient’s mood disturbances, psychiatric symptoms and complete resolution of suicidal ideations without complications or neurological deterioration.



To our knowledge, this is the only reported geriatric patient with MS treated successfully with ECT for MDD.

Data suggests that ECT could be considered a safe and efficacious option to treat MDD in patients with a history of MS.

DISCUSSION:

- MS is a neurodegenerative disorder characterized by multifocal demyelinating lesions in the central nervous system that is associated with an increased lifetime risk of MDD of 22.8%-54.0%, as compared to 10.4%-20.6% in the general population of US adults (1, 2).
- Patients with MS not only have a higher risk of developing MDD, but present with more severe clinically significant depression with a prevalence of 29.1% reporting moderate to severe MDD, which emphasizes the importance of finding effective modalities of treatment within this population (1).
- There have been 19 reported cases that detail the effects of ECT for MDD in patients with MS ranging from 23-61 years (3, 4). Of the 19 reported cases, the majority of patients had improvement in psychiatric mood symptoms with no neurological deterioration. Only 3 of the 19 cases reported adverse neurological events; however, the data was unclear as to whether these events were directly caused by the ECT or if patients with MS are at higher risk to ECT complications (3,4).
- To our knowledge, this is the only reported geriatric patient with MS treated successfully with ECT for MDD. While the data suggests that ECT is safe and efficacious in treating MDD in patients with MS, further studies need to be conducted to determine the long term effects of ECT on neurological deterioration, and the relative contraindications of ECT in patients with MS (3,4).

References:

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