

## ELECTROCONVULSIVE THERAPY AS AN EFFECTIVE TREATMENT IN NEUROLEPTIC MALIGNANT SYNDROME: PURPOSELY A CASE

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**Introduction:** NMS is an infrequent, life-threatening neurologic emergency usually associated with the use of neuroleptics and some other agents that affect central dopaminergic neurotransmission. Because of its low frequency, heterogeneous nature and clinical variability it might be difficult to diagnose.

**Objetives:** To identify risk factors to develop a NMS and to set effective treatments.

**Methods:** Literature search was performed in PubMed and UpToDate. Report of a case at our center: 69 year old man with psychotic depression which do not improve with optimal doses of SSRIs, Mirtazapine and Benzodiazepines. Olanzapine (10mg) was added and symptoms compatible with a neuroleptic malignant syndrome were appeared. Supportive care was needed because of medical complications. A treatment with bromocriptine, sertraline, lorazepam and dantrolene was begun with little improvement. It was decided to begin ECT.

**Results:** It was applied a ECT therapy (12 bifrontotemporal sessions, 380mCu) with a high and effective response. Pshycosis and pshycomotor symptoms disappeared and depression decreased significantly.

**Discussion:** Hence a high index of suspicion is needed in the diagnosis of NMS in order to reduce mortality and secuelae. Differential diagnosis must be performed with confusional states due to medical cause, catatonia, serotonergic syndrome and other neurologic states. As for the treatment, general support meassures and several farmacologic options have been used, though none of them have proved to decrease mortality. ECT remains a good option for improvement of the syndrome as well as the psychiatric condition. No systematic clinical trials evaluating the efficacy of different treatments have been done so far.