

## **Anti-NMDA Receptor Encephalitis can be a Considerable Differential Diagnosis in First Episode Psychosis**

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Anti-N-Methyl-D-aspartate (NMDA) receptor encephalitis is an autoimmune disease that was established in 2007, and since the characterization, a rapidly growing literature has described the disorder [1-3]. It is a severe form of encephalitis in which IgG antibodies are directed against the NMDA receptor; has been identified in young patients with first-onset psychiatric symptoms; occurs mostly in female; may or may not be associated with paraneoplastic syndrome [1-8]. It is presented by symptoms of psychiatric, neurological and autonomic disturbances and presentation pattern usually includes, an initial period of flu like symptoms including headache, fever, nausea, vomiting, diarrhea, or upper respiratory-tract symptoms that can last up to 1-2 weeks; psychiatric symptoms such as delusions, hallucinations, mania, agitation, catatonia, sexual disinhibition, short-term memory loss, emotional disturbances, and speech abnormalities and disorganization; and prominent neurological symptoms, such as movement abnormalities as orofacial dyskinesia's, dystonic posturing, and choreic-like movements of limbs, dysautonomia characterized most frequently by hyperthermia, tachycardia, hyper salivation, hypertension, bradycardia, hypotension, impaired consciousness, urinary incontinence, hypoventilation and seizures, which may need intensive care unit support [1-9]. As there is variation in symptom presentation with prominent psychotic features and behavior disturbances, usually psychiatrists attend the cases and this form of encephalitis is important to psychiatrists because of the possibility of misdiagnosis as schizophrenia [1,6]. Reviews revealed that Anti-NMDAR antibodies have been detected in 6.5% of patients presenting with first episode psychosis, some of whom meet diagnostic criteria for schizophrenia [3-8]. So, multidisciplinary teams such as psychiatrists, neurologists, and other emergency room physicians need to become aware of anti-NMDA-R encephalitis [6, 7]. The acute onset of severe atypical psychiatric symptoms in young female patients should raise the index of suspicion for anti-NMDA receptor encephalitis, particularly in the setting of neurological symptoms [1]. Some authors recommend, NMDA receptor autoantibody screening for all patients with the acute onset of a severe psychiatric illness comorbid with neurological symptoms, including seizures, decreased consciousness, dyskinesia, or overt motor symptoms and in the patients with first episode psychosis in post-partum [9]. There are also previous recommendations to consider NMDA encephalitis as a differential of Schizophrenia or Psychosis in first episode in young persons, with atypical psychotic presentations, psychotic presentations with prominent neurological symptoms, first episode post-partum psychosis as because of the diversified presentation of the diseases [5-9]. It was aimed at opining to consider the differential diagnosis in first episode psychosis based on the current evidences, so that it can minimize the under diagnosis and delayed diagnosis of the encephalitis and lessen the sufferings of the patients.

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