Anti-NMDA receptor encephalitis is an autoimmune disorder that was discovered in 2005. It generates antibodies to attack NMDA receptors and leads to acute encephalitis. It can be lethal in severe cases. In the past, the confirmed cases were mostly adults, but in recent years, children and teenagers with definitive diagnoses were found in clinical practices. However, some of the patients were erroneously sent to psychiatry departments for treatment due to their psychological symptoms, and thus missed the golden opportunity to recover.

Methods: A 25-year old female without any special medical history displayed stress-induced mental illness, incontinence and auditory hallucinations since her father passed away. Her symptoms were not improved after receiving treatment in other hospitals. She came to our hospital for medical assistance after she developed shortness of breath and local facial convulsions. The examination results showed no abnormalities in lumbar puncture, however the EEG demonstrated abnormal electrical discharge from the brain. The MRI report indicated high frontal lobe and basal ganglia swelling and encephalitis. After consulting with the Department of Nephrology, the existence of an intra-abdominal tumor (teratoma) as well as NMDA antibody-induced encephalitis was suspected. The patient was then given proper nursing care measures to address her issues (e.g. changes in brain perfusion, less-effective breathing pattern, physical disability and intense relationship with the caregiver).

Results: After a one and a half-month effort by the interdisciplinary medical team (the combination of the Department of Neurology, Psychiatry, Nephrology, Oncology and Gynecology), the patient received steroid therapy and immunotherapy, oophorectomy and 7 times of therapeutic hemapheresis (at her own expense). Under the good care of the interdisciplinary medical team (including the occupational therapist, dietitian, respiratory therapist, hemodialysis nurse, ICU and ward nurses), her condition finally returned to normal.

Conclusion: Anti-NMDAR encephalitis is a rare disease, but is also the most common autoimmune encephalitis. As more cases have been reported as of late, relevant information and treatment have been further discussed, thus bring patients and their families new hope. This study aims to remind healthcare professionals that for patients without any previous history of mental illness, if he/she displays flu-like symptoms combined with a rapid progression of behavioral abnormalities, neurological examination must be performed as early as possible to further confirm the possibility of anti-NMDAR encephalitis and thus provide proper treatment in time.

Keywords: Anti-NMDAR encephalitis, autoimmune disorder, teratoma.