

# Neuromyelitis optica with anti-NMDA receptor encephalitis



Case contributed by [Yuliia Solodovnikova](#)

● Diagnosis certain

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## Presentation

Presented with severe daytime sleepiness, repeated vomiting and catarrh of the upper respiratory tract. The condition worsened in 2 months with pseudobulbar palsy, dysarthria, ataxic syndrome, diffuse muscle hypotonia, decreased muscle strength and tendon reflexes, emotional lability and convergent strabismus on the left.

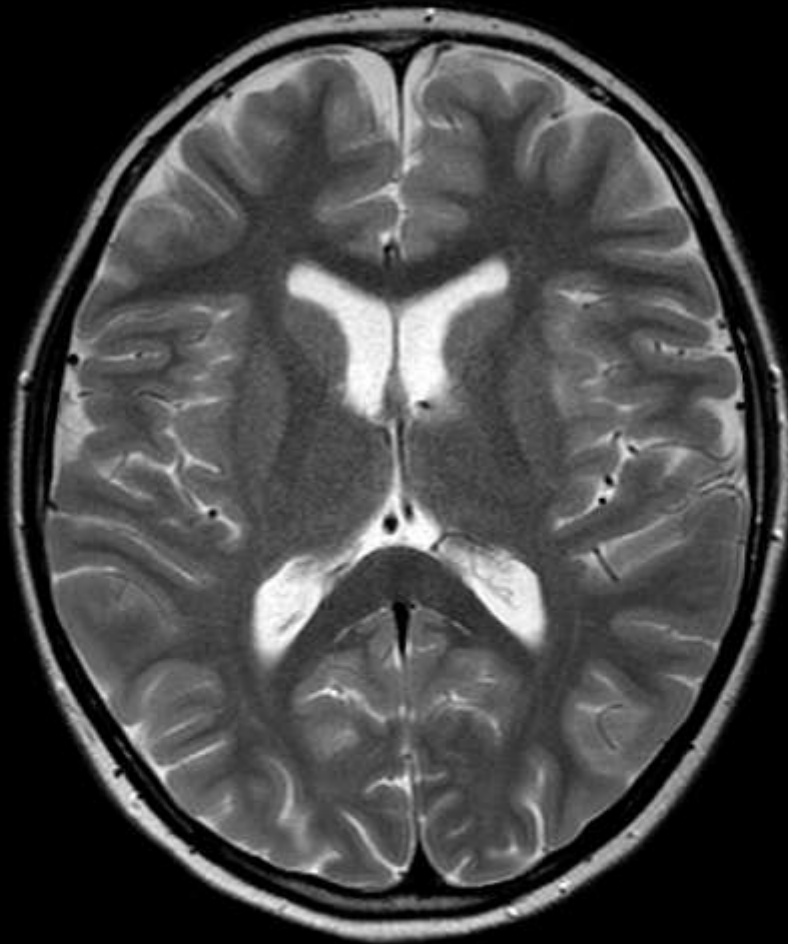
## Patient Data

**Age:** 8 years

**Gender:** Female

DCM

MRI



Bilateral white matter hyperintensity surrounding the anterior commissure as well as in extreme and external capsule on the left and in the medulla oblongata and the tegmentum of pons.

No contrast enhancement was revealed in the abovementioned areas.

## Case Discussion

Additional tests were performed.

General analysis of cerebrospinal fluid: slight cytosus up to  $25 \times 10^6/L$  (normal  $6-10 \times 10^6/L$ ) with a predominance of lymphocytes (95%).

Cellular presentation of aquaporin 4 antigen: titre  $> 1:100$  (normal titre  $< 1:10$  negative).

Oligoclonal IgG showed type 2 synthesis.

Antibodies against neuronal NMDA receptors in the cerebrospinal fluid (CASPR, NMDA, LGI, AMPA1, AMPA2, GABAR1) were detected in a titre of 64.

The patient was diagnosed with neuromyelitis optica and autoimmune encephalitis associated with NMDA receptors.

Case provided by Dr. Asel Jusupova.