

Abstract

Background

Autoimmune encephalitis has varying clinical presentations and can pose many diagnostic challenges. It commonly presents with subacute onset cognitive impairment and psychosis. However, it can also present with acute onset recurrent seizures and even leading to status epilepticus. This case highlights the importance of considering autoimmune encephalitis as a potential cause of acute onset seizures and initiating appropriate treatment early.

Case presentation

An 18-year-old, previously healthy girl presented with behavioural changes followed by recurrent seizures without any focal neurological deficits. Her MRI-brain was normal and the electroencephalogram (EEG) showed slow waves with delta brush. Analysis of her cerebrospinal fluid (CSF) showed an elevated lymphocyte count with normal protein and sugar. Autoimmune encephalitis was suspected early and she was given high dose intravenous corticosteroids followed by oral corticosteroids and plasmapheresis in addition to antiepileptics. She went onto develop oro-facial dyskinesias and status epilepticus which required escalation of antiepileptics and intubation and ventilation. The initial clinical diagnosis of autoimmune encephalitis was confirmed following the detection of N-methyl-D-Aspartate (NMDA) receptor antibodies in the CSF and serum. Imaging of her abdomen and pelvis showed an ovarian mass on the left side. Laparotomy and excision of the ovarian mass was undertaken and it was found to be a mature cystic teratoma. The patient made a steady recovery with resolution of seizures and orofacial dyskinesias and was discharged on corticosteroids and antiepileptics.

Conclusions

This case highlights the importance of considering autoimmune encephalitis as a potential cause of acute onset seizures. Furthermore, early initiation of specific therapy leads to improved clinical outcomes.