Anti-NMDA encephalitis with psychotic symptoms, a case report

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INTRODUCTION

Anti-NMDA-receptor encephalitis was firstly described in 2007 in a cohort of twelve women presenting with a severe neuropsychiatric syndrome. Since this moment there are a growing literature and case reports. This disease has a stereotypical clinical course ocurring in phases. A non-specific prodrome (subfebrile temperature, headache, fatigue) is always followed by a psychotic stage with bizarre behaviour, disorientation, confusion, paranoid thoughts, visual or auditory hallucinations and memory deficits. Because of these features a large proportion of patients end up in psychiatric therapy. In the following phase, decreased consciousness, hypoventilation, lethargy, seizures, autonomous instability and dyskinesias develop.

OBJECTIVE

Present a case report that exemplifies the importance of consider Anti-NMDA-receptor encephalitis in differential diagnosis in young people with a first psychotic episode.

CLINICAL CASE

23-year-old healthy woman with no psychiatric history was brought to a general hospital with a 2-week history of confusion, disorganized speech, delusions, auditory hallucinations and altered behaviour. Only headache was referred such a physical symptom. She was admitted in psychiatry service suspecting a psychotic disorder and antipsychotic treatment was started. She presented a rapid worsening in few days, with aggressiveness and fluctuation in level of consciousness.
Brain MRI showed alterations in the right hemisphere consistent with encephalitis (Figure 1) and she was transferred to neurology service for complete etiological study. Treatment with acyclovir was started for presumed viral encephalitis.
Later, an electroencephalogram showed non-specific slowing in right hemisphere, CSF profile revealed lymphocytic pleocytosis and gynecologic sonography detected a left periadnexal ovarian cyst. All other general investigations were normal. With the suspicion of autoimmune encephalitis, intravenous treatment with corticosteroids and immunoglobulins was started with improvement of the symptoms. The presence of Anti-NMDA receptor antibody in CSF confirmed the diagnosis.

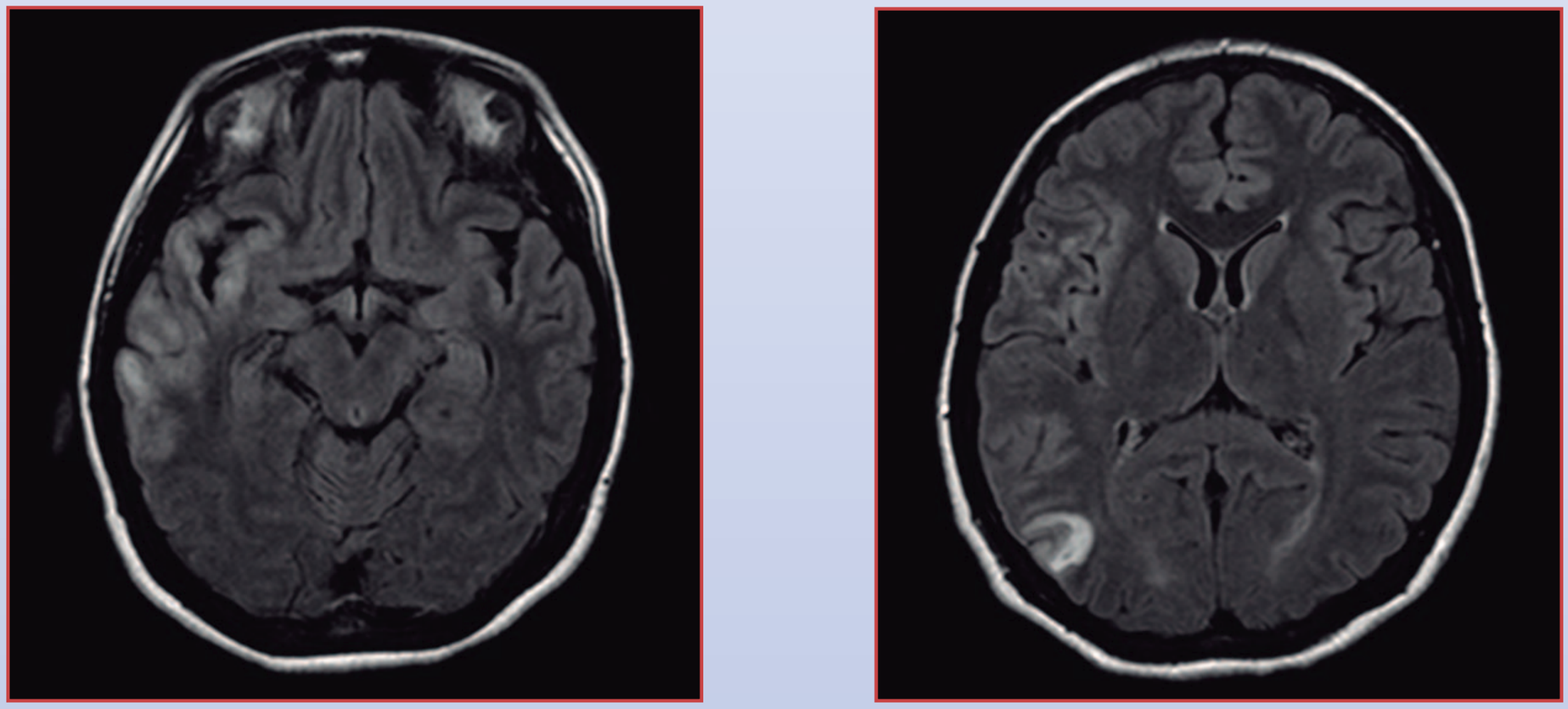

Figure 1: T2 weighted brain MRI (transversal) showing extensive area of increased signal in right temporal cortex and a hyperintense signal involving right occipito-temporal cortex.

RESULTS

The classic presentation of Anti-NMDA-receptor encephalitis involves a confluence of psychiatric, neurologic and autonomic symptoms, often with a viral prodrome. Diagnosis is based on the characteristic clinical symptoms and supporting results from brain MRI, EEG and CSF. Is treatable and potentially reversible, with the prognosis crucially depending on early recognition and prompt immunomodulatory therapy.

HIGHLIGHT & CONCLUSION

Clinicians need to be highly aware of this disorder in young patients presenting acute psychiatric symptomatology in association with some neurological symptom.

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