LGI1 encephalitis presenting as exacerbation of bipolar disorder

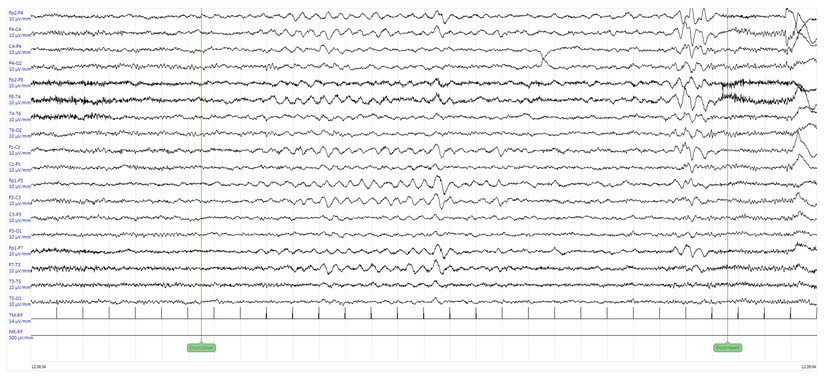
G. Serra, N. Carboni, ML. Piras, M.V. Saddi, A. Onida, L. Peddone, A. Ticca

UO NEUROLOGIA E STROKE UNIT OSPEDALE SAN FRANCESCO NUORO

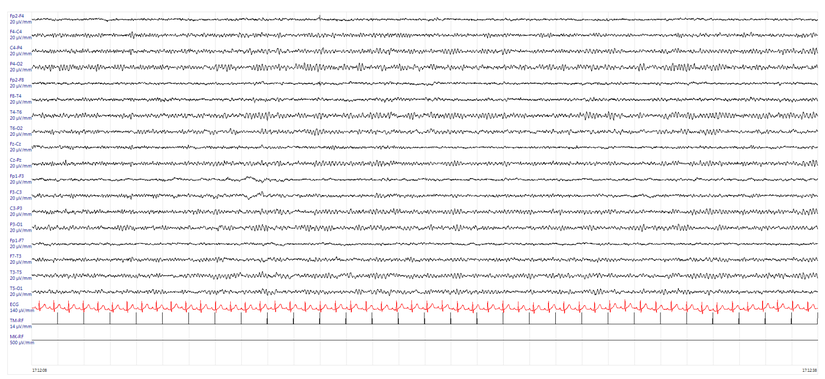
Objective: Encephalitis mediated by LGI1 antibodies are classically associated with epileptic seizures, movement disorders and psychiatric features. We describe a case of a manic episode associated with LGI1 antibodies in a patient with 30 year- history of mood disorder.
Material: Single case report.

Methods: A 64-year-old woman presented with a 5-months history of progressive irritability, insomnia, depression, aggressivity, agitation and concentration disturbances. Repeated falls were reported, with head trauma. She was diagnosed with mood disorder and was treated with quetiapine and sertraline, without improvement. Previous medical history included mood disorders, with three episodes having occurred when she was aged 35,37 and 61 years, characterized by depression, anorexia, insomnia, panic attacks and cleptomania; those episodes were treated medically with good success. The patient came to our attention in August 2015 for agitation episodes with overactivity and mild lower limb choreiform movements with daily fluctuations. Laboratory investigations, including TPHA, HIV,anti-Hu, -Yo, -Ri,-Ma,-CV2, NMDAR, resulted normal. Genetic test excluded the Huntington disease. LGI1 autoantibodies were detected in serum. Cognitive functions evaluation showed deficit in attention, recall and working memory. Cerebrospinal fluid examination, including tau, fosforylated tau and beta 42, were normal. Electroencephalography revealed intermittent irregular slow waves at the bilateral frontotemporal area. Body CT scan were unremarkable. The patient was treated with 1gr of intravenous methylprednisolone for 5days followed by oral prednisone 1mgr/kg/day and intravenous immunoglobulin 2gr/kg with initial behavioural improvement and disappearance of dyskinetic movements and falls. In October 2015 she was re-admitted for relapse of psychiatric symptoms. She started plasma exchange 5 course, olanzapine 20mg/day, clotiapine 90mg/day and valproic acid 900 mg/day, with good clinical recovery. Neuroleptic treatment was progressively discontinued, with good control of agitation episodes with low dose of diazepam and valproic acid 900mg/day. Electroencephalography progressively normalized. She started maintenance monthly plasma exchange, prednisone 0,5mg/kg/d. After 9months she still present mild behavioural impairment.

Discussion: Our patient had affective features consistent with DSMV criteria for manic episode. Extra-psychiatric symptoms and electroencephalographic abnormalities suggested organic disease. High titre LGI1 positivity and response to immunomodulatory treatment confirmed the diagnosis of LGI1 encephalitis. Our case demonstrates that LGI1 related encephalitis should be suspected in patients with mostly affective manifestations and previous mood disorders history. Clinical and electroencephalographic findings could be useful tools in identification of patients at risk, in order to install prompt immunomodulatory treatment.
Conclusion: Our case suggests that in the assessment of mood disorders autoimmunity mediated by anti-LGI1 has to be considered.



EEG before treatment



EEG after treatment

1) Pamela Agazzi • Christian G. Bien •Claudio Staedler • Vittorio Biglio • Claudio Gobbi. Over 10-year follow-up of limbic encephalitis associated with anti-LGI1 antibodies. J Neurol (2015) 262:469
2) Diagnostic and statistical manual of mental disorders. Fifth Edition. DSM 5. American Psychiatric Association
3) León-Caballero J1, Pacchiarotti I2, Murru A2, Valentí M2, Colom F2, Benach B2, Pérez V3, Dalmau J4, Vieta E. Bipolar disorder and antibodies against the N-methyl-d-aspartate receptor: A gate to the involvement of autoimmunity in the pathophysiology of bipolar illness. Neurosci Biobehav Rev. 2015 Aug;55:403-12.

Sin

XLVII CONGRESSO NAZIONALE
22-25 OTTOBRE 2016 – VENEZIA

WebPoster