## Letter to the editor

## LEVETIRACETAM AND PSYCHOSIS

Helena Trebbau-López Saray Rodríguez-Toledo Laura Reyes-Molón Julia del Río-Vega

Instituto de Psiquiatría y Salud Mental Hospital Clínico San Carlos, Madrid

Correspondence: Servicio de Psiquiatría Hospital Clínico San Carlos C/ Profesor Martin Lagos s/n 28040 Madrid E-mail: helentrebbau@gmail.com

Among the new drugs included in the therapeutic armamentarium for epilepsy,<sup>1-3</sup> we have found levetiracetam,<sup>4,5</sup> an anti-epileptic drug which in spite of having an acceptable safety profile, has shown the capacity to induce acute psychotic episodes that completely remit when the drug is withdrawn in different studies.<sup>6</sup>

We present the case of a 45-year old woman diagnosed of partial complex epilepsy from childhood that was stabilized with carbamazepine 400 mg/day over all the years. Due to the decrease in libido secondary to this drug, she began to have problems in her personal life so that her attending neurologist decided to switch her to levetiracetam 1500 mg/day. Two months after the change in anti-epileptic treatment, the patient developed an acute psychotic episode with affective symptoms, predominating irritability, with delusional ideas having megalomystic content and behavioral disorders secondary to auditory hallucinations. This clinical picture did not change even after the drug was withdrawn, as other previous studies have described. Therefore, at present, two years after the debut, she continues to require maintenance antipsychotic medication.

In this clinical case, the psychotic episode onset of the patient coincided with the switching of carbamazepine to levetiracetam. However, the symptoms did not remit when the drug was withdrawn, so that we propose the possibility that, in our case, levetiracetam had acted as a precipitator of a latent psychotic disorder.<sup>7, 8</sup> Other differential diagnoses that we considered were: Bipolar disorder - Mixed Phase (F31.6), probably stabilized due to the use of carbamazepine during her adolescence, Mental Disease due to Medical Disease (F07.0) as the epilepsy itself can produce personality changes and Bipolar type Schizoaffective Disorder (F25.0).<sup>6</sup> After studying different factors and considering the different differential diagnosis, we tend to consider that levetiracetam played an important role as a precipitator of a latent psychotic disorder whose symptoms have remained, even without frank mood state disorders, after the withdrawal of the drug.

## **REFERENCES**

- Del Río Vega JM. Epilepsias. En: Psiquiatría de enlace. Vol. Neurología. Madrid: Ed. SCM, 2004; p. 217–37.
- Solís OH, Arauz CJ. Modelos experimentales de epilepsia. En: Feria VA, Martínez MD y Rubio DF. Epilepsia Un enfoque multidisciplinario. México: Trillas, 1986; p. 74-97.
- Weintraub D, Buchsbaum R, Resor SR Jr, Hirsch LJ. Psychiatric and behavioural side effects of the newer antiepileptic drugs in adults with epilepsy. Epilepsy Behav. 2007;10:105–10.
- Irsi D, Safdieh JE. The safety of levetiracetam. Expert Opin Drug Saf. 2007 May;6(3):241-50.
- Ben Menachem E, Gilland E. Eficacia and tolerabilidad del levetiracetam durante 1 año de seguimiento en pacientes con epilepsia refractaria. La incautación de 2003; 3:131-5.
- Kanner AM. Recognition of the various expressions of anxiety, psychosis, and aggression in epilepsy. Epilepsia. 2004;45(Suppl 2):22-7.
- 7. Mula H, Trimble MR, Yuen A, Liu RS, Sander JW. Eventos psiquiátricos adversos durante la terapia de levetiracetam. Neurología. 2003;5:704–6.
- Bayerlein K, Frieling H, Beyer B, Kornhuber J, Bleich S. Druginduced psychosis after long-term treatment with levetiracetam. Can J Psychiatry. 2004;49:868.