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Case report

A case of refractary epilepsy and related pain due to dysmenorrhea solved with loading dose of lacosamide: clinical and neurophysiological correlates

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Summary. In most cases, the etiology of epilepsy is unknown, although some individuals may develop epilepsy as a result of certain brain injuries, following a stroke, a brain tumor or because of drugs and alcohol. Even some rare genetic mutations may be related to the onset of the condition. Seizures are the result of excessive and abnormal activity of neurons in the cerebral cortex. In this case report we show a clinical case of refractory epilepsy due to pain related to uncontrolled dysmenorrhea. The patient, 43 yrs old, had a history of epilepsy of 20 years and ovarian cancer. She was treated with lamotrigine, clonazepam and levomepromazina maleato. At admission the patient shew seizures due to pain related to dysmenorrhea. In emergency we treated with verapamil hydrochloride 10 mg ev, subsequently verapamil hydrochloride 20 mg in 250 ml of saline solution as maintenance dose. Then we decided to administer a loading dose of 100 mg cpr of Lacosamide to stop the treatment with verapamil hydrochloride. With Lacosamide we solved the seizures in 24 hours. (www.actabiomedica.it)

Key words: lacosamide, loading dose, refractory epilepsy, pain, dysmenorrhea

Case report

We report the case of a 43-year-old woman patient with refractory epilepsy due to pain related to dysmenorrhea and anamnestic history of ovarian cancer at the age of 27 yrs. The patient came in Emergency Repart of our Hospital for a epileptic crisis and, in emergency, she was treated with Verapamil 10 mg iv, immediately after with verapamil hydrochloride 20 mg in 250 ml of saline solution iv as maintenance dose. Unfortunally only after verapamil hydrochloride 20 mg in 250 ml of saline solution iv we had the possibility to evaluate the eeg (figure 1). At the time of the first visit in Internal Medicine Department, the patient had reactivation of pain and consequently seizures for two days, with a rate of three seizures every 24 h, the so-called breaking-throught crisis. The patient was admitted in Internal Medicine Department with this oral therapy: l lamotrigine, clonazepam, levomepromazina maleato and verapamil hydrochloride 20 mg in 250 ml of saline solution iv. Early treatment modification with fans and the antiepileptic drugs gave a transient improvement of symptoms, but became ineffective in the following epileptic crisis. For this reason we administred a loading dose of lacosamide 100 mg cpr every 12 h and the treatment with verapamil has been slowly decreased until the total suspension. After 48 hours of treatment with new anti-antiepileptic lacosamide in loading dose and anti inflammatory drugs we noted a reduction in pain intensity (mean verbal numeric scale (vns) reduced from 10 to 5 and the total absence of seizures despite the total suspension of verapamil. Only add-on treatment with Lacosamide was effective to stabilize the seizures during pain due to dysmenor-

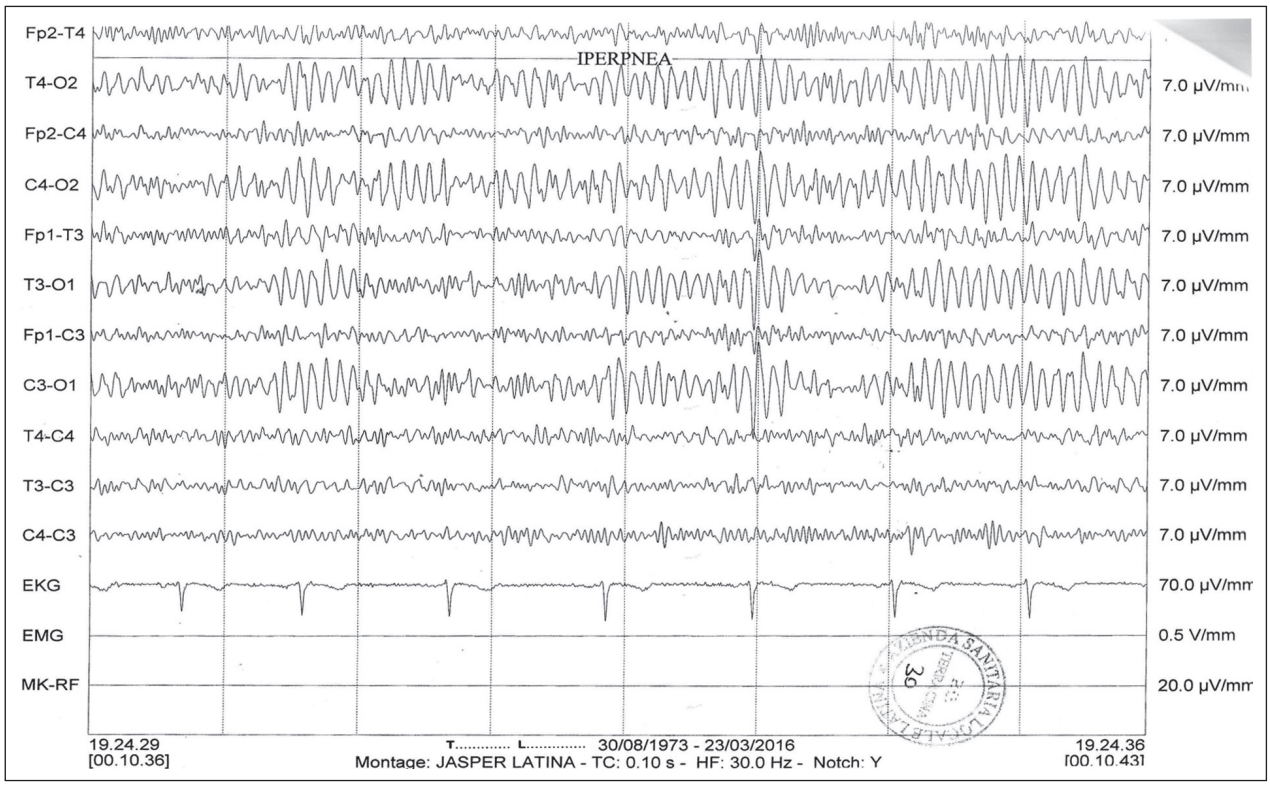

Figure 1. Electroencephalogram during controlled breath

rhea. The patient was discharged from hospital after four days with this therapy: lamotrigina 100 mg h 8 AM, 2 PM, 8 PM, nozinan 25 mg 1 cpr at 8 PM , rivotril 15 ggtt at 8 AM, rivotril 25 ggtt at 8 PM and lacosamide 50 mg 1 cpr at 8 AM and 1 cpr at 8 PM as maintenance dose. At the time of ambulatory after fifteen days, during the visit, the patient was in stable condition and did not refer seizures or pain. We suppose that pain during dysmenorrhea could be linked to uterin fibroma or other gynecological diseases, for this reason the patient is under control for gynecological conseling because of her anamnestic history of ovarian cancer. Actually we are waiting the report of gynecological counseling.

Conclusion

We have described a clinical case of a patient with refractory epilepsy treated in emergency. The patient began epilepsy at the age of about 27 and ovarian cancer. We were fully convinced of the good therapeutic index of treatment with rivotril 25 gts, nozinan and lamotrigina 50 mg bis in die, but the patient had three seizures in 24 hours in department. Therefore we adopted a therapy based on a loading dose of lacosamide. Only the treatment with new antiepileptic drug lacosamide solved the emergency of breaktrougth-seizure and then anti-inflammatory therapy with acetylsalicylate showed a reduction in pain intensity. We hope to underline that lacosamide could represent a further therapeutic option in the treatment of refractory epilepsy in emergency situations, especially for its peculiar indication of loading dose. In fact in this case we were able to stop treatment with verapamil hydrochloride in 24 h and to quickly stabilize the patient.

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