Clinical Report

Case report: Absence seizure

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Introduction

A seizure is the result of the abnormal neuro-electrical activity of the cerebral cortex. It can be triggered by light, fever, infections of the central nervous system, hypoglycemia, trauma abstinence and many others. Can be preceded by an aura, olfactive aluccionations, dizziness, headache and more. During the crisis, the patient can present tonic stiffening, clonic movements, sphincter release, tongue biting etc. They can be classified as generalized or partial. After the episode, the postictal state can present as confusion; usually, the patient does not remember. It is important to remember that seizure is a transient disorder, while Epilepsy is defined by recurrent seizures.

An absence seizure (AS) is a type of generalized seizure that is transmitted genetically. They typically start in childhood and rarely persist in the teenage years. This type of seizure is marked by a brief loss of consciousness, which many times can be referred to by the parents as a "lapse of inattention". They can last 5-10 seconds and can happen many times in one day. It can be triggered by hyperventilation and the ECG shows a pattern of three waves per second.

Case description

The patient is an 18-year-old female with a past medical history of AS, but no other relevant information. The mother reports no complications during pregnancy and that the patient had a normal neuropsychomotor development. During her childhood, infections such as meningitis, encephalopathy and others were not reported. She had her first menstruation at 11,5 years old.

At the age of 12, her mother related episodes as "blackouts" where the patient did not answer her. The mother took the patient to a Psychologist which said, after some sessions, the family should take the patient to a Neurologist. After doing an ECG (Figure 1) with photostimulation and hyperpnea, as requested by the Doctor, she was diagnosed with AS and started taking Sodium Divalproex.

Figure 1 Eletroencephalogram of the brain

When she was 13, still on her medication, she had a generalized tonic-clonic seizure. When questioned about it, she said she was not taking her medicine at the right time, or taking it at all, and that she was having a lack of sleep. In the Emergency Room was made a blood screening that showed Valproic Acid (58mcg/mL) in her blood. She did another ECG (Figure 2), which still presented compatible changes with AS, and an MRI (Figure 3) with contrast that did not reveal any damage. The conduct was taking the medication on time and having enough sleep.

At the age of 16, after presenting three normal ECGs (Figure 4), the medication was taken.

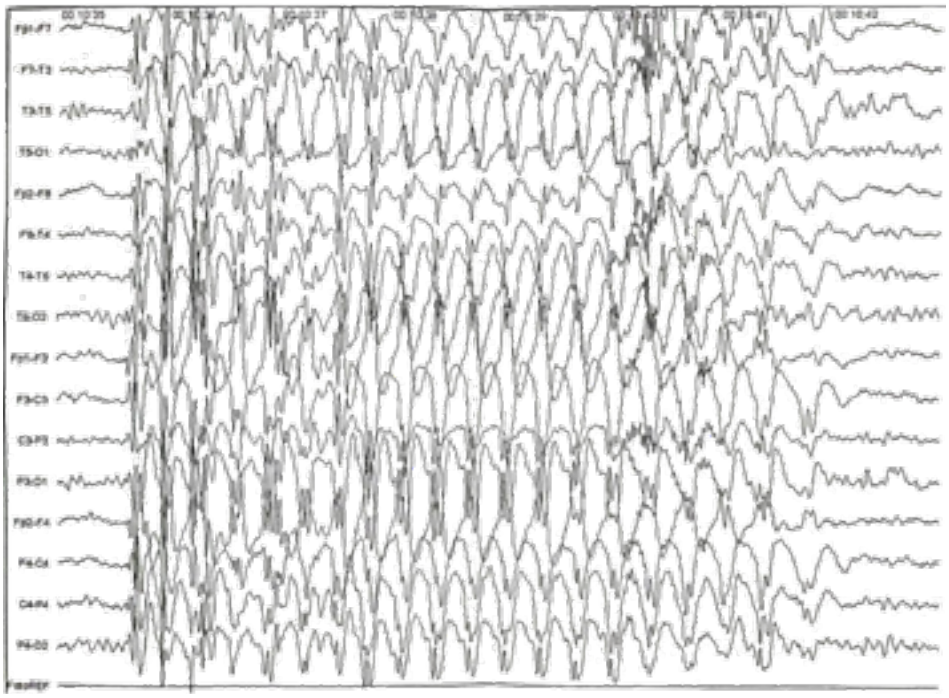

Figure 2 ECG presenting compatible changes with AS.

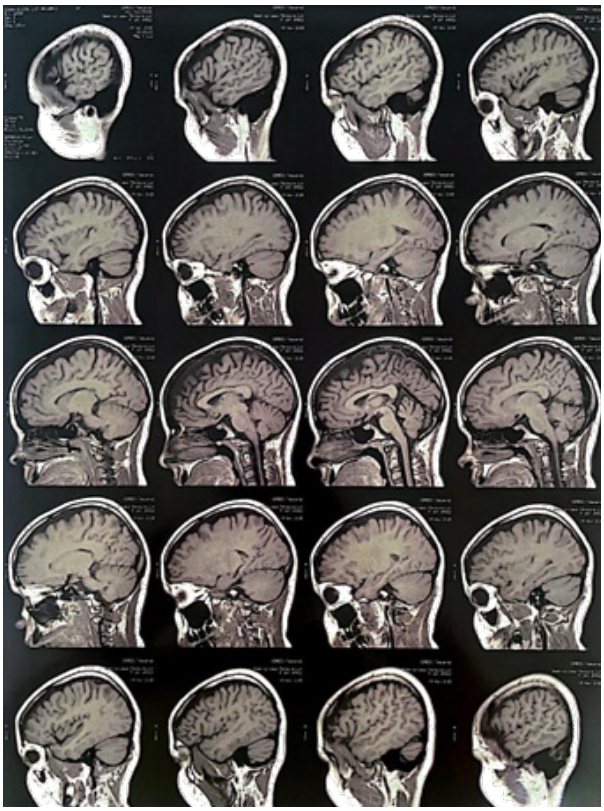

Figure 3 Magnetic resonance image scan of the brain

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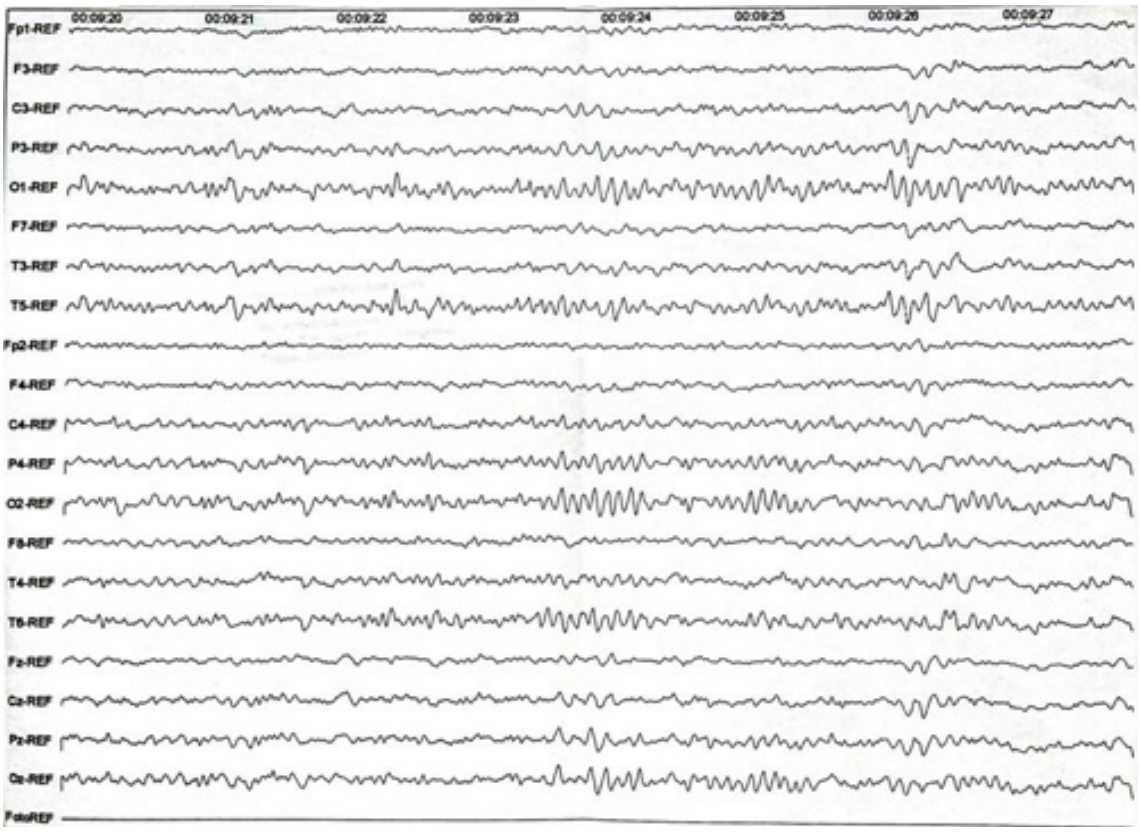

Figure 4 Three Eletroencephalogram of the brain

Now at the age of 18, 1 year and a half without medication, she presented another generalized tonic-clonic seizure. One day before, she referred abscence but did not have certainty, the same day she had very little sleep and related absences. After, she had a generalized seizure, that lasted approximately 3 minutes, with tongue bite, no sphincter release and a postictal state of approximately 40 minutes. In the hospital, she had a blood screening that showed normal indices in the hemogram, of potassium (4.7mEq/L) and creatinine (0.8 mg/dL). It was prescribed Sodium Divalproex 250mg 2 times a day (12/12h). After, the Neurologist did a full neurological physcial exam that was completely normal. It was also requested an ECG (Figure 5), with photostimulation and hyperpnea, that had no compatible abnormalities of AS and a contrasted MRI (Figure 6) with no changes. The conduct was taking the medication at the right time, follow up every 6 months and beware if any changes or absences.

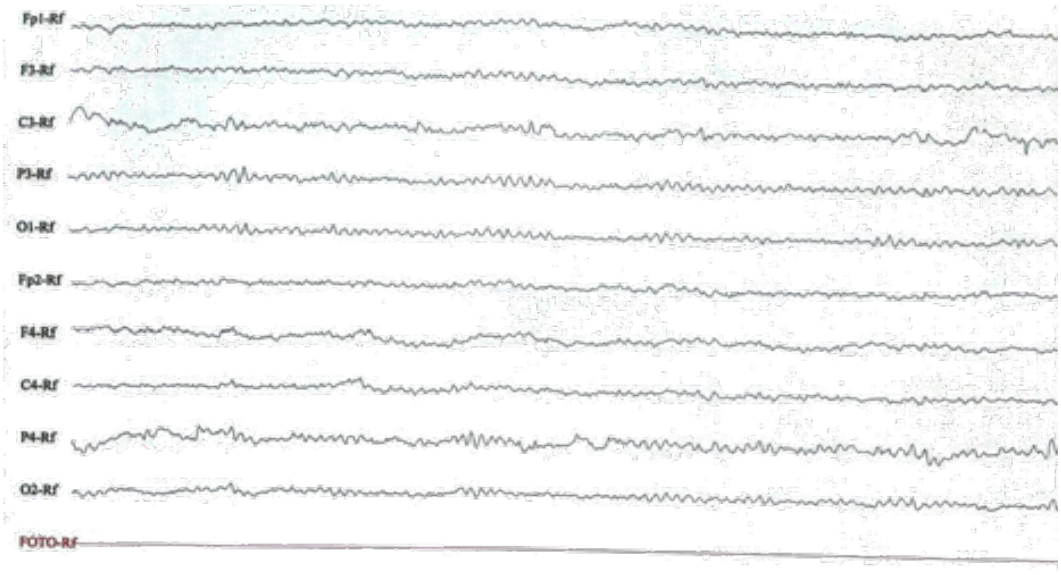

Figure 5 ECG of brain

Figure 6 Magnetic resonance image scan of the brain

Conclusion

By the description of the case, in this patient, we can conclude that the generalized tonic-clonic seizures were triggered by a lack of sleep and medication. We can also see that it is an atypical case where the AS persisted at the beginning of her adult life.

Acknowledgments

None.

Conflicts of interest

The authors declare no conflicts of interest.

References

1. Greenberg David A, Aminoff Michael J, Simon Roger. Neurologia. Clínica: 8a Edição. AMGH Editora Ltda., 2014.