Background and importance Hyperammonaemia is known as a metabolic disturbance due to deficiency of some enzymes of the ‘urea cycle’, a biochemical process where nitrogenous products are purified from the organism and whose accumulation leads to neurological disorders, vomiting, seizures, coma and death.

Aim and objectives To evaluate the evolution and response after administration of corrective treatment in a 5-month-old paediatric patient diagnosed with epilepsy who developed hyperammonaemia secondary to high doses of valproic acid (VA).

Material and methods To reverse hyperammonaemia, the patient’s status epilepticus, the frequency of seizures, ammonia levels (μg/dL) and VA (μg/mL) were monitored.

Results Because of persistence of seizures, intravenous VA treatment was started, initially at a bolus dose of 400 mg and subsequent infusion of 20 mg/kg (rate 1 mg/kg/hour). The rate of infusion should increase 10 hours after the start of treatment at 1.5 mg/kg/hour, controlling the crisis and performing sequential therapy with oral VA at 40 mg/kg/8 hours. Later, cloning and disconnection episodes were again evident, forcing monitoring of VA levels and assessment of the general state. Hyperammonaemia was diagnosed, with levels of 140 μg/dL of blood ammonia (reference range 29–70 μg/dL).

There was clinical and therapeutic agreement with VA levels of 113 μg/mL (range 50–100 μg/mL).

Conclusion and relevance Medication overdose to reverse a particular situation can trigger unexpected toxic conditions, which could cause organic or metabolic alterations. An adequate pharmacotherapeutic follow-up could avoid risk situations, especially in the paediatric population.

References

References and/or acknowledgements

1. Special thanks to the paediatric and emergency units.

Conflict of interest No conflict of interest

Background and importance The Health Service Executive Medicines Management Programme has highlighted the need for vigilance when prescribing and dispensing pregabalin or gabapentin as both drugs have a risk of addiction and a potential for misuse/abuse. A recent systematic review found that reports of pregabalin and gabapentin abuse are increasingly being documented worldwide.1

Aim and objectives To examine the pharmacy supply of pregabalin/gabapentin use in the previous 4 years were generated from the pharmacy information system. A data collection of pregabalin/gabapentin prescribing was conducted in August 2018. A data collection form was designed to collect information on the number of patients prescribed pregabalin or gabapentin, if treatment was started prior to hospital admission and if the patient had a history of epilepsy. Clinical pharmacists completed the data collection by examining the drug chart and the medical notes.

Results

Hospital usage of pregabalin and gabapentin increased by 7% and 16%, respectively, from 2015 to 2018.

1. Evoy K, Morrison M, Saklad S. Abuse and misuse of pregabalin and gabapentin. Drugs 2017; 77: 403–26

Conflict of interest No conflict of interest

Background and importance The 3 monthly formulation of paliperidone palmitate (3MPP) was introduced to the Italian market in 2017 for the treatment of schizophrenia in adult patients.

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Conflict of interest No conflict of interest