Paper (6)

Title:

Effect of Pyridoxine on the safety of Levetiracetam in a pediatric population with Epilepsy - A Retrospective pharmacovigilance study.

Abstract

Introduction: Epilepsy is one of the most common neurological disorders affecting children. Levetiracetam (LEV) is a widely used anti-epileptic drug (AED) with good pharmacokinetics and a low risk of side effects. Pyridoxine (vitamin B6) is one of the effective additional therapies used to prevent and treat the adverse effects of LEV in children.

Aim of the study: The study's goal was to see how pyridoxine affects the safety of LEV therapy in a pediatric epilepsy population.

Subjects and Methods: A retrospective study on pediatric patients was conducted at Egypt's Fayoum University Hospital. Thirty patients were selected. The age range of patients receiving LEV as monotherapy ranged from 6 months to 11 years. Patients were divided into two groups: those who only received LEV and those who received LVE plus pyridoxine. The causality and severity of adverse drug reactions (ADRs) were evaluated.

Results: ADRs were reported by 71.4% of LEV patients, but only 18.8% of LEV plus pyridoxine patients. These ADRs involved various systems, with 50% involving gastrointestinal symptoms that were significantly p0.006 higher in the LEV group compared to the LEV + Pyridoxine group. In the LEV group, 35.7% had behavioral ADRs that were significantly p0.008 higher. Other neurological side effects were observed. The WHO-UMC criteria for assessing the causality of ADRs revealed that 20% were probable and 23.3% were possible. All of the ADRs were common.

Conclusion: The current study found that pyridoxine can help control some ADRs caused by LEV in children.