

ABSTRACT

Background: Febrile seizures is one of the most common seizures in children .The exact aetiology of febrile seizures is still not fully understood, serum trace element like magnesium may plays an important role by its direct action on central nervous system. **Objective:** The aim of my study is to estimate the serum magnesium level and determine its correlation with the occurrence of febrile seizures. **Methods:** This case control study was conducted on 100 children diagnosed with febrile seizures as the cases and 100 age matched febrile children as the control group. Serum levels of magnesium were measured. Statistical analysis was performed with SPSS software using student-T test. **Results:** The mean serum magnesium levels were 2.04 mg/dl and 1.98mg/dl in children with febrile convulsion, febrile children without convulsion respectively. There were no significant differences between the cases and controls in term of age and gender. There was no significant difference on serum magnesium between the simple and complex febrile seizures. **Conclusion:** The serum magnesium levels were found to be normal in cases and controls. This study concludes that there was no significant relationship between serum magnesium level and febrile seizures.

KEYWORDS

Febrile seizures, Magnesium, Simple febrile seizures, Complex febrile seizures.