

The role of serum prolactin in diagnosis of seizure disorders in children

M. Elsied, A. Soliman, T. Goda, N. Elawdy

Neurology Dep. Zagazig university Faculty of Medicine, Magdy Abdelhamed Aidaros Elsied, Egypt

Objective: The purpose of this study is to review the use of serum prolactin assay in epileptic seizure diagnosis and to differentiate between epileptic seizures from psychogenic non-epileptic seizures in children. **Patients:** This study was conducted in 48 children aged 1-18 years of age, the study comprised of four groups: Group-1., consisted of children with epilepsy which was further subdivided into GTCS, CPS and SPS, Group-2 comprised of children suffering from non-epileptic paroxysmal events like breath holding spell, syncope and pseudoseizures..... Group-3., comprised of children having febrile convulsions, Group-4 consisted of children who served as controls. **Methods:** Blood sample was collected within two hours of the event in all the groups, serum prolactin level was estimated by ELISA technique. **Results:** in the present study, significant elevation of serum prolactin level was observed only in the Group-1 (28.31 ± 15.61) as compared to controls (9.97 ± 2.91) and the highest levels were observed in children with GTCS and with status epilepticus, serial seizures, maximum elevation of prolactin was seen within 2 hours post ictally, as the prolactin levels become normal after two hours of post ictal period, the test loses its significance. **Recommendations:** Elevated serum prolactin assay, when measured in the appropriate clinical setting within 2 hours after a suspected event, is a useful adjunct for the differentiation of epileptic seizures from psychogenic non-epileptic seizure among children.