

Usefulness of Serum Prolactin in Differentiating Epileptic and Pseudoseizures in Children

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Abstract:

Transient hyperprolactinemia has been reported to follow unprovoked seizures. This study was conducted in 90 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 having febrile convulsions. Group-3 comprised of children suffering from non-epileptic paroxysmal events like breath holding spell, syncope and pseudoseizures or conversion reaction. Group-4 consisted of children who served as controls. Blood sample was collected within two hours of the event in all the groups. The exact interval between the event and the collection of blood sample was noted. Serum prolactin level was estimated by ELISA technique. In the present study, significant elevation of serum prolactin level was observed only in the Group-1 (28.77 ± 15.49 ng/ml) as compared to controls (9.53 ± 2.45 ng/ml) and the highest levels were observed in children with GTCS. Maximum elevation of prolactin was seen within 15 to 30 minutes post ictally. As the prolactin levels become normal after two hours of post ictal period, the test loses its significance.