

Abstract :

Evaluation of Febrile Convulsion; prevalence & clinical manifestations among children under 6 years referring to south Health Centers in Tehran on 2008

Objective: The present study was designed to evaluate the frequency & clinical manifestations of the Febrile Convulsion in children under 6 years in an Iranian sample.

Patients & Methods: 600 patients between 3 months – 6 years (333female & 267 male with age mean 21.8 ± 16.2 months) referring to south Health Centers in Tehran were selected randomly. They were evaluated on demographic data(age, gender, birth priority), socioeconomic level(parents education level, parents family relationship & number of children), perinatal history(birth weight, birth age, mother's age during pregnancy), medical history(neurological disease, FC or epilepsy in family) and clinical manifestations(type & duration of FC, remitting etc)

Results: The prevalence of FC was seen on 39 patients(6.5%). 8.1% of females & 4.5% of males had FC($p=0.074$). The mean age of patients 38.6 ± 15.8 months) had significantly difference(Mean Difference:17.9, 95%CI:13.5-22.45; $p<0.001$). the difference between two genders was not significant. There was no relationship between the prevalence of FC and parents family relationship and also paternal education level. Maternal education significantly influenced the FC prevalence ($p<0.001$). There was no relationship between the prevalence of FC and maternal age during pregnancy, number of children and birth priority (Mean Difference:405.2, 95%CI:229.9-580.4; $p<0.001$). There was no relationship between the prevalence of FC and birth age and type of birth. Positive family history of FC was significantly influenced the prevalence of FC ($p<0.001$). The relation between the prevalence of FC and positive history in mother, father & other family children was significantly different too (respectively $p=0.034$, $p<0.001$ and $p<0.001$). Positive history of epilepsy was significantly influenced the prevalence of FC ($p<0.001$);The same as positive history of epilepsy in mother, father and other family children(all $p<0.001$). The prevalence of FC was significantly higher among children with positive history of epilepsy($p<0.001$). Mean age of FC first attack WAS 23.3 ± 7.8 months. The duration of attack was reported on less than 1 minute in 17.9%, between 1-5 minutes among 64.1%, between 10_15 minutes in 10.3%, 5.1% more than 15 minutes and more than 30 minutes in 2.6%. 92.3% of children had simple FC and 7.7% had complex one. Remitting was seen on 35.9% of patients. Number of remitting was one in 30.8% and two in 5.1% of patients.

Conclusion: We detect a high prevalence of FC among Iranian children and a statistically significant relationship between maternal education level and job, positive family history of FC and also Epilepsy. Being aware of these factors helps in reducing the parents stress & increasing the patients' quality of life .

Key Words: Febrile convulsion, FC, prevalence, clinical manifestations