Oral Health Status and Treatment Needs among Epileptic Patients (5-15) Year- Old (a comparative study)

A Thesis

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Abstract

Background: Epilepsy is a chronic neurological disorder characterized by behavior that results from abnormal electrical activity in the brain.

<u>Aim of the study</u>: Study was conducted to investigate the oral health status and treatment needs of epileptic patients and compared to control group.

<u>Material and methods</u>: Total sample of 220 (136 boys and 84 girls) with age rang 5-15 years old was examined, whom were attending to neurological and psychological department in Baghdad teaching hospitals. A similar number of controls were examined from kindergarten and schools in Baghdad city. The WHO criteria (1987) were used to assess the individual tooth status and treatment needs. Rhamfjord teeth were select to detect the plaque index (Silness and Löe 1964), calculus index (Rhamfjord, 1959) and gingival index (Löe and Silness 1963). Garcia-Godoy classification (1981) was followed for detecting the occurrence of traumatic dental injuries.

<u>Results:</u> The results of this study showed that the percentage of caries free for controls (7.27%) was higher than in the epileptic patients (3.64%). The mean values of caries experience for deciduous and permanent dentition in epileptics (dmft= 5.169 ± 0.129 , dmfs= 10.635 ± 0.266 , DMFT= 2.464 ± 0.062 , and DMFS= 3.823 ± 0.096) were found to be higher than in controls (dmft= 3.595 ± 0.089 , dmfs= 7.154 ± 0.179 , DMFT= 1.131 ± 0.028 , and DMFS= 1.614 ± 0.040). Statistically no significant differences were found in all mean values between two groups. The highest treatment needed in the epileptics for deciduous dentition was found to be for one surface restoration, while for permanent dentition was found to be for one surface restoration.

Statistically high significant difference in the mean value of plaque index was reported between epileptic patients and control group, while no statistical significant difference in mean value of calculus index was found between two groups. The mean value of gingival index was reported higher in epileptic patients (0.571 ± 0.038) than reported in controls (0.098 ± 0.003) . The difference was found to be statistically significant. In this study gingival hypertrophy showed only in epileptic patients with total percentage (5%).

Concerning the levels of mother's education of epileptics, this study showed that there were statistically significant differences among all levels with plaque index, gingival index, mean value of dt and mean value of DT. The higher percentage of dental trauma was reported in epileptics (10.454%) compared with controls (1.818%), boys more affected than girls in both groups. Trauma to the tongue was reported only in epileptic patients with total percentage (2.272%), while trauma to the lips was not reported in both epileptic patients and controls.

<u>Conclusion</u>: The condition of oral health and dental status of the epileptic group is worse than matched group and this is may be due to the parents of epileptic children as they more concerned about seizures problem and neglect their oral health status, in addition to the side effect of antiepileptic drugs that used.