¹Ş İnci Yolal, ²Y Karal, ³S Karasalihoğlu, ³B Tokuç. ¹Department of Pediatrics; ²Department of Pediatrics, Division Pediatric Neurology; ³Department of Public Health, Medical Faculty of Trakya University, Edirne, Turkey

Aim Sleep disturbances are frequently seen in the epileptic patients. This may be because of either own epilepsy, or by chance, or because of the antiepileptics used. We tried to figure out the effects of epilepsy and antiepileptic drugs on the sleep structure.

Methods We questioned 35 epileptic patients, who are followed up by Medical Faculty of Trakya University, Department of Pediatrics, Division Pediatric Neurology, and their 35 healthy siblings with Pediatric Sleep Questionnaires which were filled up by patients' families. Patients' structures of sleep were evaluated by asking the following questions regarding behaviours in night sleep and daytime sleep, behaviours in daytime, attention deficit disorder with hyperactivity.

Results We have ascertained that totally questionnaire points of epileptic childrens' behavioral problems, sleep-related behavioral disorders, breathe problems, frequency rate of wake up at nights, sweating during sleep, long lasting fall a sleep time, difficulty on fall asleep, nightmare problems, feeling weary after sleep, somnambulism scores were higher than the ones of their healthy siblings. Also as the epileptic group were evaluated according to their antiepileptic treatment we did not find a significant difference between the different antiepileptic treatments.

Conclusions Sleep disturbances frequently faces in the epileptic facts and there are few studies about this issue. As indicated in our study, sleep structure is not normal in epileptic patients eventhough seizures are under control by treatment. The evaluation of sleep disturbances should be the main part of further treatment of epileptic patients.

1819 SLEEPING BRUXISM AND OROFACIAL DYSFUNCTION IN CHILDREN AND ADOLESCENTS

doi:10.1136/archdischild-2012-302724.1819

¹MBD Gavião, ¹ABM Montes, ²PM Castelo, ¹F Kobayashi, ¹MCS Marquiez. ¹Department of Paediatric Dentistry, University of Campinas - UNICAMP, Piracicaba; ²Department of Biological Sciences, Federal University of São Paulo, UNIFESP, São Paulo, Brazil

Background and Aim Sleep bruxism (SB) is a parafunctional oromotor habit that can pose a threat to the integrity of the masticatory system. Thus, this study aimed to evaluate temporomandibular disorders (TMD) and orofacial dysfunction in children and adolescents with SB, taking on a case-control study design.

Methods Three hundred and sixteen subjects aged from 7 to 17 years were examined. From these, 52 presented SB (Case Group) according to parent's report about teeth grinding or clenching at least three time a week and presence of dental wear facets according clinical examination. The Control Group was composed by 104 gender/age/dentition phase-matched subjects. The mean age was 10.86±2.32 years. TMD was evaluated according to the Research Diagnostic Criteria for Temporomandibular Disorders (RDC/TMD) Axis I. For orofacial dysfunction diagnosis, it was used The Nordic Orofacial Test Screning (NOT-S). The data were analyzed using descriptive statistics, Shapiro-Wilks, unpaired *t* test, Mann-Whitney, Qui-square and Fisher's exact tests, when indicated, considering $\alpha=0.05$.

Results The prevalence of SB was higher in boys (60%) than girls ($P<0.05$). The presence of TMD was similar in both groups ($P>0.05$). Subjects with SB presented NOT-S scores significant higher than subjects without SB ($P=0.002$), as well as girls in relation to boys in Case ($P=0.010$) and Control ($P=0.019$) groups for NOT-s interview. Habits, impairment in chewing, in swallowing and in masticatory muscles were determinant factors upon orofacial dysfunction.

Conclusions TMD was not implied in BS, but the orofacial dysfunction could be considered influencing factor in children and adolescents with SB.

1820 FACTORS ASSOCIATED WITH OBJECTIVE SLEEP PATTERN IN SCHOOL AGE CHILDREN LIVING IN TEHRAN CITY

doi:10.1136/archdischild-2012-302724.1820

^{1,2}A Saber Gharamaleki, ³A Zamani, ⁴K Jaafari. ¹Faculty of Health and Nutrition, Students' Research Committee, Tabriz University of Medical Science, Tabriz; ²Department of Nutrition and Biochemistry, School of Public Health; ³Tehran University of Medical Sciences; ⁴Department of Nutrition and Biochemistry, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran

Objective Our objective was to identify factors associated with sleep pattern in school age children living in Tehran city.

Study Design This was a cross-sectional study of 6–9 year olds children ($n=270$) who recruited by multistage sampling among primary school in Tehran city. Sleep pattern and efficiency was measured for 7 consecutive days using Actigraph accelerometer. Height and weight were directly measured using standardized equipment. Other factors including age, gender, history of preterm birth, birth weight, playing video game, watching TV, family income and parental educational level gathered by standard questionnaire.

Results 7days and weekdays sleep duration was significantly shorter ($p<0.05$) in older children while there was not the same for weekend sleep duration. After adjusting for age we found no significant associations between measured factors and sleep pattern. There was no significant gender difference for sleep pattern, but girls had better ($p<0.05$) sleep efficiency during 7 days and weekdays compared to boys.

Conclusions Sleep efficiency showed an inverse correlation with sleep duration. No significant relationship was found between sleep efficiency during 7 days, weekdays and weekend with the personal and the environmental factors.

1821 SLEEP REPORTED COMPLAINTS WITH PARENTS AMONG THE PEDIATRIC BETWEEN 3 MONTHS AND 14 YEARS OLD PRESENTED IN IRANIAN PEDIATRICS

doi:10.1136/archdischild-2012-302724.1821

S Afsharpaiman. Health Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran

Background Every disruption in the start, continue or decrease of quantity or quality of the sleep are considered as sleep disorders. The major cause of sleep disorders in children are temporary and spontaneously improve.

Methods In a cross-sectional study, children who presented to the Najmیه hospital in Tehran during 2009 and 2010 were enrolled. Children 3 months to 14 years with any chronic disorders who were referred for routine screening and vaccination in this age range were included and the data was collected by using a questionnaire included demographic and clinical. The data were analyzed using SPSS software version 17th by statistical frequency, chi-square, Student *t* test and Mantle Hanzel tests and P value < 0.05 was considered significant.

Results The 301 children were studied. Mean age was 26.60±31.59 months with a standard deviation. The study population sex ratio, male to female equal to 53.3% and 46.4% is equivalent to 161 to 140. 55.48% of the parents brought the child with complaints of sleep. The underling variables including sex, age, affect the prevalence of parent report sleep disorders (P value < 0.05).

Conclusion We suggest that further programmed evaluations are needed to evaluate children according to their age and the children should be assessed for sleep disorders in any range of the ages.

1822 EFFECT OF NEEDLE LENGTH FOR RESPONSE TO HEPATITIS B VACCINE IN MACROSOMICNEONATES: A PROSPECTIVE RANDOMIZED STUDY

doi:10.1136/archdischild-2012-302724.1822