

brain vessels were studied. Patients with hypothalamic syndrome often complained of excess body weight (79.6%), increased appetite (82.6%), headache (78.5%) of varying intensity, increased blood pressure (38.5%), cardiac arrhythmias (31.8%), and irritability (22.7%). Obesity of various degrees was observed (overweight - 23.3%, first degree - 33.9%, second degree - 42.8%). The heart rate in children was basically normal 88.3%); in 11.7% there was a tachycardia. The level of blood pressure in most cases (73.6%) was normal, while in 17.3% of cases, episodic elevations were observed, and in 9.1% of cases there was a persistent arterial hypertension of the I degree. All patients have been electrocardiographically examined. In all cases a sinus rhythm was registered, in 79.2% - sinus brady- or tachyarrhythmia. Disorders of glucose tolerance were detected in 11 children. The level of C-peptide was elevated and a flat glycemic curve was observed in 16 children. The level of cholesterol and beta-lipoprotein was increased in 18 children. Microalbuminuria was observed in 23 children. Angiohypotonic type of cerebral hemodynamics was observed in 69.4% of the examined REG patients.

Conclusions. In most children with hypothalamic syndrome during puberty obesity of various degrees have been found; in 30.77% hyperinsulinism was observed, and another 44.23% of children presented microalbuminuria. In 26.4% of cases a tendency of arterial hypertension development was noticed, which is a predictor of metabolic syndrome.

Key words: hypothalamic syndrome, puberty age, clinical presentation, glucose tolerance

66. EPILEPSY WITH MYOCLONIC SEIZURES: ELECTROPHYSIOLOGICAL AND NEUROMORPHOLOGICAL PECULIARITIES

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Introduction. Recent electroencephalography (EEG) studies in epilepsy patients with myoclonic seizures have revealed distinct ictal and interictal discharges that rely on structurally and functionally interconnected cortical and/or subcortical networks. However, the neuroanatomical substrates in this type of seizures are insufficiently characterized.

Aim of the study. To explore the EEG patterns and associated cortical and subcortical (thalamic) structural abnormalities in epilepsy patients with myoclonic seizures.

Material and methods. For this purpose, were performed EEG recordings and brain magnetic resonance imaging (MRI) in 11 epilepsy patients (24 ± 6 years; 3 males) with myoclonic seizures and 11 healthy subjects (28 ± 4 ; 6 males). The MRIs were processed using FreeSurfer cross-sectional stream and the between-group differences in cortical thickness (CT) and thalamic volumes assessed.

Results. Interictal EEG revealed polyspike waves in 27% of patients and spike-slow waves in 37% and no discharges in 36% of patients. The frequency of discharges was > 3.5 Hz in 27%, 2.5 - 3.5 Hz in 36% and < 2.5 Hz in 9% of patients. Intermittent slow waves were recorded in 37% of patients and EEG background asymmetry in 9%. Photoparoxysmal response was obtained in 82% of patients. The analysis of ictal EEG disclosed generalized patterns: polyspike waves in 45% of patients, spike-slow waves in 28%, spike-slow waves with a frequency of ~ 3 Hz in 18% and of < 2 Hz in 9% of patients. A statistically significant difference ($p < 0.001$, uncorrected) of CT was found in the following clusters: left postcentral, supramarginal and rostral middle frontal cortices, and right lateral occipital, rostral middle frontal, supramarginal, pars triangularis and insular regions. CT correlated with the disease duration in the left superior, middle and inferior temporal and inferior parietal cortices, and right supramarginal, inferior parietal and rostral anterior cingulate cortices. Thalamic volumes in patients ($7078.5 \pm$

508.7/left 7804.1 ± 737.4 mm³) compared to healthy subjects(right 8155.9 ± 702.1/left 9168.1 ± 1442.5 mm³) were significantly lower(p = 0.014, p = 0.001, respectively).

Conclusions. Ictal EEG patterns were relevant in all epilepsy patients with myoclonic seizures, while interictal EEG discharges only in 64% of patients. Alterations of CT along with bilateral thalamic volume loss support the hypothesis of involvement of aberrant cortico-thalamic networks in patients with myoclonic seizures.

Key words: myoclonic seizures, electroencephalography, cortical thickness, thalamic volume

67. THE EFFECTS OF MIRROR THERAPY ON PATIENTS WITH NEUROLOGICAL MOTOR DEFICIENCY. A CLINICAL PILOT STUDY

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Introduction. Stroke has a major socio-economic impact on the population. The consequences of the disease are fatal in 20 – 35 % of cases, and in 30 – 60 % patients report permanent functional difficulties of the upper limb. Mirror therapy is a relatively new method proposed in the treatment of post-stroke hemiparesis. It is based on the activity of mirror neurons in the neuroplasticity process. The objective of the study was to evaluate the efficacy of mirror therapy in patients with neurological motor deficiency of the upper limb resulting from an ischemic or hemorrhagic stroke.

Materials and methods. This study was prospective, controlled, and pilot. It included a pretest and a posttest. A total of 20 stroke patients were included: 10 in the experimental group (EG) and 10 in the control group (CG). EG underwent conventional rehabilitation program 2 hours a day for 14 days + mirror therapy 30 min/day, 14 days, and GC – only conventional rehabilitation program 2 hours a day, 14 days. The Functional Independence Measure (FIM), Fugl-Meyer Assessment(FMA) were performed at the beginning and at the end of the study to compare changes in motor recovery and motor function after intervention.

Results. The patients from the experimental group achieved significantly higher scores (p <0.02) for FIM and FMA than those from the control group. EG showed improvements of 2.6% in FIM testing, compared with 1.2% in CG. The same differences were found using other examinations: FMA arm score increase by - 9.7% in EG, GC - by 3%; FMA hand score EG – increase by 11%, CG - by 2.5%; FMA total score EG increase by 11% and CG only by 2.8%.

Conclusions. This pilot study proved the efficacy of mirror therapy on the patients with neurological motor deficiency. This technique is a useful tool in treating the post stroke hemiparesis by easiness of implementation, low cost and acceptability. For maximum effect, sessions of mirror therapy should last 30 minutes/day, 5 days a week, 4 weeks.

Key words: mirror therapy, stroke, motor recovery.

DEPARTMENT OF PEDIATRICS

68. ULTRASOUND FEATURES OF THYROID GLAND IN JUVENILE IDIOPATHIC ARTHRITIS

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