

control with an interval of 3 months by means of AST-test. Dynamics of bronchial obstruction syndrome severity on admission to hospital with exacerbation was assessed by the point scale and reflected the efficacy of relieving therapy.

According to the acetylation rate schoolchildren suffering from late-onset asthma formed two clinical groups. The 1<sup>st</sup> clinical group included 34 children suffering from late-onset asthma phenotype with slow acetylation status, 38 children with late-onset asthma and fast acetylation mechanism formed the 2<sup>nd</sup> clinical group.

The analysis of quick relieving therapy efficacy in members of the clinical groups marked a better relief effect in the 1<sup>st</sup> clinical group of children than among schoolchildren with late-onset asthma phenotype and fast acetylation status. The efficacy indices of relieving therapy were found to be better in children with late-onset asthma phenotype and slow acetylation mechanism. It was probably explained in these patients due to longer drug metabolism in their organisms and therefore prolongation of clinical effect with more aggressive combined bronchodilation therapy.

The discrete analysis of ACT-test indices found a slight improvement of asthma symptoms control in children with late-onset asthma phenotype and slow acetylation mechanism due to mainly limited activity and less required  $\beta$ 2-agonists of a short action. The improvement of the total control symptoms of the disease was found mostly at the expense of the daily and night symptoms regress and less activity reduce which results in reduced requirement of fast-acting bronchial spasmolytics.

Thus, efficacy indices of relieving treatment were better in children with late-onset asthma phenotype and slow acetylation mechanism, and the results of basic treatment were better in patients with late-onset asthma and fast acetylation status.

## Khlunovska L.Yu. PECULIARITIES OF CEREBRAL BLOOD FLOW IN CHILDREN WITH HEADACHE

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Headache is a very common and nonspecific sign of a number of diseases. It may be associated with eye disorders, inflammation of the sinuses, manifestation of vegetative dysfunction, hypertension etc. Headache can have different localization and character, may be accompanied by dizziness, nausea and even loss of consciousness. In most cases, children with headache are trying to unsuccessfully cure it for a long time and therefore require a detailed examination and install the root causes of the disease. Frequently, headache in children has a vascular mechanism, due to violation of vascular tone of the brain and disorders of cerebral circulation.

The purpose of the work was to assess the state of cerebral blood flow according to data of rheoencephalography (REG) in children with headache.

The study involved 22 children in age from 9 to 17 years old. All patients underwent a comprehensive clinical, laboratory and instrumental examination. Particular attention paid to the results of REG study, which evaluated the state of cerebral blood flow. Evaluation included blood supply, vascular tone, the tone of arterioles and venous drainage in internal carotid artery basin (ICAB) and vertebro-basilar basin (VBB). All data processed by the generally accepted rules for medical statistics.

The average age of patients was  $14.1 \pm 2.5$  ages, among them were 12 girls and 10 boys. Normal blood supply in ICAB was observed in 3 children ( $13.6 \pm 0.5\%$ ). Dyscoordination of blood supply (increased on one side and low on the opposite) was present in 5 children ( $22.7 \pm 0.6\%$ ), hypovolemia and hypervolemia were present in 7 children each (by  $31.8 \pm 0.8\%$ ). Normal blood supply in VBB happened in 4 children ( $18.2 \pm 0.6\%$ ), dyscoordination, hypovolemia and hypervolemia occurred in 6 children each (by  $27.3 \pm 0.7\%$ ). Significantly more often incidents of violation of cerebral vascular blood supply occurred (p<0.001).

Vascular tone in ICAB and VBB was elevated in 20 children (90,9  $\pm$  1,3 %) and reduced only in 2 children (9,1  $\pm$  0,4 %) (p<0,001). The tone of arterioles was normal in 2 children (9,1  $\pm$  0,4 %), dystonia occurred in 4 children (18,2  $\pm$  0,6 %), hypotonia – in 10 children (45,4  $\pm$  0,9 %) and hypertonia – in 6 children (27,3  $\pm$  0,7 %). Significantly more frequent were incidents of changed tone of arterioles (p<0,001). Venous outflow was not broken in 14 children (63,6  $\pm$  1,1 %), broken – in 8 children (36,4  $\pm$  0,8 %) (p<0,01). In all children with violated venous outflow was observed increased vascular tone and hypertonus of arterioles.

So, in almost all children with headache it had vascular genesis. Were found changes of blood flow in ICAB and VBB. Headache was caused by spasm of cerebral vessels, blood flow dyscoordination in right and left hemispheres and venous blood stasis.

## Marusyk U.I. THE INDICATORS OF ATOPIC REACTIVITY OF CHILDREN WITH EARLY-ONSET BRONCHIAL ASTHMA

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Bronchial asthma (BA) is one of the most common and impressive problems in pediatrics now. Despite the improvement in treatment, modern approaches to pathogenesis of the disease and development of diagnostic criteria and treatment strategy, the incidences of asthma are significantly growing day by day. According to epidemiological studies conducted in different countries, the population suffering from bronchial asthma ranges from 2 to 30 % of children.