Now, according to the Global Strategy for prevention and treatment of asthma, it is considered that with the most adequate therapy, basic clinical manifestation of disease can be controlled. Although the clinical practice is indicative of the fact that by means of standard treatment regimens the diseases can be controlled only in every second patient. It is probably associated with phenotypic features of the disease, and various terms of the debut in particular.

According to scientific views, early-onset asthma is associated with atopic mechanism of the disease. Taking into account this knowledge considering the indication of basic treatment of asthma its efficacy may likely be increased.

Considering this fact the objective of our scientific study was the following: to assess the efficacy of atopic reactivity in children with early-onset BA in order to improve disease control.

To achieve this aim we have conducted our study following the three main tasks: to analyze the dynamics of skin hypersensitivity in clinical groups between early and late onset asthma; to study the level of interleukin -4 (IL-4) in clinical groups; to study clinical-epidemiological index of BA basic therapy effectiveness in school-age children.

50 school-age children with BA were subjected to a comprehensive examination. The distribution of children into the groups of comparison was performed according to the age since the disease onset: patients with onset of BA younger than 3 years – early-onset asthma (I group) and older than 6 years - the late-onset (II group). The groups did not vary significantly by sex, age and severity of the disease.

All the patients underwent the assessment of genetic index (GI) for atopic diseases (number of relatives of patients allergic to the total number of family members), allergic history, the content of IL-4 and intradermal allergy tests with non-bacterial allergens.

The results of the study were evaluated from the perspective of clinical epidemiology to the definition of relative risk (RR), absolute risk (AR), odds ratio (OR) indicating their confidence intervals (95% CI). Comparison of atopy available in children with different phenotypes of BA showed that the average GI in both groups of comparison did not differ. Although GI more than 0,19 was recorded in 40,0% children with early-onset asthma and only in 28,0% patients of II group ($R\varphi>0,05$). The distinctiveness of atopy in children with different phenotypes of BA showed that allergic history was found in almost all people from the first group (96,0±3,9%) and only in one out of three patients in the second one (69,57±9,2% ($P<0,05$)). Allergic skin tests were positive in 92,3% of children from the first group and in 56,0% in the second group. The level of interleukine -4 more than 3,6 pg/ml was in 80% patients from the first clinical group and in 66% children from the second clinical group. The indicators of high diagnostic value of IL-4 in the blood serum to identify the phenotype of early-onset asthma in children relatively to the late-onset one were associated with the absolute risk – 0,17, relative risk – 1,47 (95% CI 1,2-1,7) and odds ratio – 2,1 (95% CI 1,1-3,9). At the same time, there is a strong significant correlation between the content of interleukin -4 in the serum and skin hypersensitivity of an immediate type to epidermal allergens, which confirmed an active participation of this cytokine in the implementation of atopic inflammation process in the body.

So, eosinophilic mechanisms of inflammation in the bronchi dominate in the vast majority of children with early-onset asthma, as significantly higher sensitivity to house dust allergens and the tendency to a higher content of Il-4 were found. The associations found in the studies should be considered in the administration of the individual monitoring treatment of BA in children.

Pidvysotska N.I.

POLYMORPHISM OF EDWARDS SYNDROME

Department of Pediatrics and Medical Genetics
Higher State Educational Establishment of Ukraine
«Bukovinian State Medical University»

Chromosomal diseases occupy one of the leading places in the structure of congenital and hereditary diseases of human. The diagnosis of most hereditary syndromes bases on the characteristic of its clinical features. Edwards Syndrome (OMIM 601161) (or trisomy 18) is characterized by an additional 18 chromosome and manifests by multiple congenital malformations. Firstly described in 1960. By J. Edwards Edwards Syndrome occupies the second place after Down Syndrome of all chromosomal aberrations in newborns. The prevalence of the syndrome is 1:3000 - 1:8000 in the population and 1 % - among all autosomal trysomy, more often diagnosed in females. Clinical manifestations of the syndrome in children are quite variable, but the most typical phenotypic characteristics are: low birth weight (about 2177-2340 grams for in-term newborns), "bird" profile of the face, extremities abnormalities (deformation of the hands, feet). Typical are microcephaly, protruding head, deformed and low-set ears, micrognathia, short eye slits, ptosis. Anomalies of the skeleton are short neck, broad chest, narrow hips, a limited withdrawal of the hip joints, bent position of the fingers, feet deformity, hypoplasia of nails and dermatoglyphics change by increasing the numerous of arcs on the fingers.

The purpose of the study was to familiarize physicians with diagnostic criteria of Edwards Syndrome on the example of own clinical observations. We used clinical and genealogical, syndromologic, cytogenetic (karyotyping) methods.

Probands T. - a girl, aged 1 day from VIII unintended pregnancy on a background of iron deficiency anemia, chronic cholecystitis, polyhydramnios, preterm labor at term 35-36 weeks, newborn weight - 1600 g, length - 46 cm. Ballard Score - 21 (gestation age - 32 weeks).

Clinical-genealogical research of proband family. Mother - 47 years old, father – 50 years old. In history - contact with chemicals (herbicides, pesticides) and heavy physical labor. Parents are not relatives. Heredity in the

family is not burdened. Children from previous pregnancies are healthy. Ultrasound, performed in the period of 20-21 weeks of pregnancy revealed malformations of the upper limbs.

Clinical examination of proband: dolihocephalia, epikant, chin hypoplasia, dysplastic, deformed ears, talipomanus. Ultrasound diagnoses congenital heart defect (complete atrioventricular communication, ductus arteriosus); NSG (morphological immaturity of the brain); X-rays of the chest (atelectasis of the right lung) Child was consulted by specialists: cardiologist; ophthalmologist; orthopedist (bilateral radial talipomanus); geneticist (TAR syndrome?, Edwards Syndrome?).

To verify the diagnosis was passed complete blood count (normal platelet count) and cytogenetic analysis (karyotype of proband T.: 47, XX, 18+ - regular trisomy of 18 chromosome). The girl died at the age of 1 month due to multiple organ failure.

Thus, a data demonstrate the clinical case of polymorphism of Edwards syndrome and significant nosological range of conditions which should be differential diagnosis, that has predictive value regarding the course of the disease.

Popeliuk N.O., Popeliuk O-M.V.*

THE BRONCHO OBSTRUCTIVE SYNDROME AND ALIMENTARY ALLERGY IN INFANTS

Department of Pediatrics, Neonatology and Perinatal Medicine
*Mykola Turkevych Department of Human Anatomy**
Higher State Educational Establishment of Ukraine
«Bukovinian State Medical University»

Respiratory pathology dominates the structure of child morbidity. Broncho-obstructive syndrome is often accompanied by respiratory pathology in small children. The prevention of the occurrence of relapsing forms of obstructive bronchitis in cases of repeated acute obstructive bronchitis (AOB) in young children is an urgent problem today. One of the factors of recurrent obstructive bronchitis (ROB) in children is severe atopic reactivity. Standard treatment of AOB includes hypoallergenic diet etiotropic, antispasmodic, bronchodilator, mucolytic, expectorant drugs, and physiotherapy. In most cases, a course of therapy leads to recovery of the child, but there are many children with further development of AOB and its recurrent course.

We aimed to study the influence of food allergy as an additional factor of ROB development in children and to work out the ways to prevent it.

The follow-up within three years observation of children with ROB on the background of a food allergy, according to the data of the pediatric unit of Chernivtsi clinical hospital, revealed the need to include allergy examination to identify the cause and significance of food allergens. Nowadays, there are several accepted methods of estimation of allergy. We have selected and conducted the examination of food allergens in 108 children aged 3 months to 3 years through an inhibition of neutrophil mobilization response. The study group was made of 66 children with ROB and 42 children registered with a single episode of AOB formed the group of comparison. In addition to general clinical examination methods, a thorough examination of a food diary, allergic history and heredity were carried out. In the study group of supervision, in 42.8% of cases food allergy was seen in the first year of life, mainly to cow's milk, as well as fruits and vegetables. Every third child had the hereditary burden. Anomalies of a constitution, mainly exudative-catarrhal type, were seen in 62.2% of children. In the comparison group food allergy to cow's milk was detected in 18.8% of children, a hereditary burden was determined in 19.5% of cases. Exudative-catarrhal type was seen in 22.2% of patients. All proven food allergens were withdrawn from the diet of children and hypoallergenic diet was intended. Children of the first eighteen months with an allergy to cow's milk protein diet were recommended a therapeutic powder based on deep hydrolyzed protein.

We have found out that in the group of children whose parents carefully adhered elimination and hypoallergenic diet, the frequency of hospitalization with recurrent obstructive bronchitis was significantly less in comparison with the rest of the patients, whose parents kept no food recommendations.

Thus, our investigation proved that the correction based food allergy examination reduces the frequency of relapses obstructive bronchitis in children at an early age.

Popeliuk N.O., Popeliuk O-M.V.*

INDIGESTIONAL CONDITIONS IN CHILDREN AGED UNDER ONE YEAR WITH RESPIRATORY PATHOLOGY

Department of Pediatrics, Neonatology and Perinatal Medicine
*Mykola Turkevych Department of Human Anatomy**
Higher State Educational Establishment of Ukraine
«Bukovinian State Medical University»

The most frequent manifestations of functional disorders of the digestive tract include regurgitation (passive reproach of a small amount of gastric contents into the throat, mouth and out). The tendency to emesis was observed in 25-85% of healthy children aged under one year of age, nearly in half of them the regurgitations are sustainable and influence on weight and height indices.

The aim of the study was to optimize the treatment, to estimate the efficacy of medical antireflux therapy compounds and their comparative characteristics.

During 2016 in the pediatric department 295 children under the age of 6 months with various somatic pathology (acute respiratory disease, obstructive bronchitis, pneumonia, urinary tract infection) without concomitant