The Evolution of pneumonia in children with *Mycoplasma* infection was complicated in 11 cases: in 6 cases with pleural effusion and in 5 cases with atelectasia (patients from the *Mycoplasma*-negative group had pleural effusion only in 2 cases).

Mycoplasma infection in children with obstructive bronchitis and bronchial asthma is a significant risk factor, thus the identification of this infectious agent is important for the development of efficient programs of treatments in pediatric pneumology.

Key words: *Mycoplasma pneumonia,* wheezing disorders, children.

Cystic fibrosis (mucoviscidosis) in children

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Cystic fibrosis (CF) is a monogenic autosomal recessive disorder with a chronic progressive evolution, which determines an abnormal production of viscous secretions from the glands of exogenous excretion, and characterized by chronic obstructive pneumopathy, chronic diarrhea, malnutrition and malabsorption syndromes.

Respiratory symptoms onset in CF patients usually starts early – 80% in the first year of life with recurrent bronchitis, mostly with severe obstructive syndrome, latent persistent pneumonias, pulmonary and non-respiratory complications development. CF is also characterized by the installation of chronic obstructive pulmonary disease, which manifests itself by wheezing, prolonged expiration, persistent cough during respiratory infectious episodes which has latent evolution, nocturnal exacerbations, paroxysmal and exhausting evolution. Bronhoobstructive syndrome is develops al the level of the small bronchi and is conditioned by the viscous, sticky secretions and infective bacterial component. Expectorated secretions are abundant, purulent, in cases with progressive evolution haemoptysis may develop. In long-term evolution children develop progressive respiratory failure. The progressive evolution of the disease is conditioned also by resistant bacterial agents (*S.aureus*, *Ps aerugenosae*, *H. influenzae*), which accelerates destructive processes of the lung parenchyma and contribute to the expansion of the pulmonary fibrosis phenomena, and development of complications in the lungs (pneumothorax, atelectasis, bronchiectasis, bullous-distrophy, lung abscess, haemoptysis, asphyxia, calcinates in lungs, pulmonary hypertension and pulmonary heart disease).

Chest deformity is a clinical expression of the severe pulmonary pathological process: thoracic cage expansion, dorsal kyphosis, hypertrophic pulmonary osteoarthropathy (in schoolage children) which causes chest pain, bone brittleness (fragility), swelling, and hydrarthrosis. Chronic persistent severe hypoxia determines the presence in CF children of fingers hippocratism.

ENT disorders at children with CF are presented by the nasal polyposis, sinusitis and chronic rhinitis, transmission deafness.

The prognosis is reserved, with high risks of death in cases with severe neonatal onset. Currently the disease may have a stable evolution, if favorable circumstances are present: early diagnosis, efficient treatment with digestive enzymes, control of pulmonary infections, respiratory kinesiotherapy.

Key words: cystic fibrosis, children, etiology, clinical features, complications, management.

Pathogenic mechanisms of bronchial asthma phenotype in schoolchildren

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The aim of the study was the assessment of total immunoglobulin E (IgE) in children with different phenotype of bronchial asthma.

This study included 122 schoolchildren (aged 6-12 years) with bronchial asthma, including 37 schoolchildren (30.3%) with intermittent asthma, 39 children (32%) with persistent mild asthma, 33 children (27%) with moderate persistent asthma, and 13 children (10.7%) with severe persistent asthma. The values of total IgE were evaluated by the immunoenzymatic method. The results were statistically processed in *Epi Info 3.5* program.

The definition of the severity of bronchial asthma phenotype in 122 schoolchildren revealed allergen-induced bronchial asthma in 70.5% (86 schoolchildren); virus-induced bronchial asthma – in 7.4% (9 schoolchildren); bronchial asthma induced by physical effort – in 6.6% (8 schoolchildren) and unresolved asthma – in 15.6% (19 schoolchildren). The total IgE concentration was higher in schoolchildren with allergen-induced bronchial asthma (400,3±42,4 ME/ml) in comparison with IgE values in virus-induced bronchial asthma (45,9±3,9 ME/ml, $p<0,001$), in asthma-induced by physical effort (37,9±3,9 ME/ml, $p<0,001$) and in unspecified asthma (28,5±3,3 ME/ml, $p<0,001$). In this work we revealed significant correlation between the total serum IgE