

requirements of DSTU 3662-97 "Whole cow's milk. Procurement requirements. There was also a pattern of increase in psychrotrophic microorganisms in samples of milk from cows from private farms in winter and spring, and a significant increase in spore-forming microorganisms in summer.

LUNG PATHOLOGY IN CHILDREN OF DIFFERENT AGES: MODERN ASPECTS AND DIAGNOSIS

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Introduction. Respiratory diseases in children of different age groups is a global medical and social problem. Pathology of the respiratory system significantly determines the level of infant morbidity and mortality. Two centuries ago, lung inflammation was considered one of the most dangerous diseases, as most of the patients with this disease died. This disease, occurring in childhood, in a number of cases leads to the invalidity of affected children in adulthood. This determines the importance of pediatric pulmonology for clinical medicine as a whole. Today the problem of pathogenesis, early diagnosis and treatment of pneumonia has gained special attention and has become one of the topical issues in our time. This pathology is one of the main causes of morbidity and mortality of children of different ages around the world. Over the last decade, mortality from pneumonia has increased dramatically, with severe complications developing in reanimation units, reaching 40-50%.

In European countries pneumonia affects about 15 people per 1,000 inhabitants, while in Ukraine it affects about 40-50,000 every year. Typically, most cases of the disease are caused by *Streptococcus pneumoniae*. However, in children and adolescents, *Mycoplasma pneumoniae* is the most common cause and is the most common non-specialised cause of respiratory tract infections, accounting for 40% of all pneumonia cases in children over 5 years of age. The most common causes of non-spontaneous pneumonia include: pneumococcus, haemophilus influenzae and viruses and fungi. It should also be noted that the etiology of lower respiratory tract diseases can vary considerably between age groups. At the present level, an additional problem in the persistence of pneumonia has been the formation of resistance to antimicrobial drugs in the incubators of the disease, which are able to change their genome, mutate, resulting in the incubators becoming more virulent.

Aim. The aim of the research is to study a lung pathology in children of different ages their modern aspects and diagnosis.

Materials and methods. Research objective: to identify peculiarities of lung pathology course in children of different ages and to optimize approaches to pneumonia diagnostics in modern conditions.

Results and discussion. The survey results showed that most cases of pneumonia among children were 3-6 years old (72 children - 40%) and 7-10 years old (51 children - 29%). Only one third of the total number of children aged 11-14 (34 individuals - 19%) and 15-18 (21 individuals - 12%) were recorded. A total of 178 patients of different ages participated in the examination.

Considering the current state of infectious pathology in children, a decreased immune status, inflammatory processes, disruption of microbiocenosis due to antibacterial drugs and the presence of concomitant pathology are among the causes of lung pathology in children.

The number of patients hospitalized with concomitant diseases was 87 (49% of the total number), which could lead to the development of secondary pneumonia with a background disease. The highest number of opportunistic infections occurred in children aged 3 to 6 years (38 cases -

47%), the lowest - from 15 to 18 years (6 cases - 7%). This indicates that children of preschool age are more susceptible to various diseases, and it is during this period that the immune system develops rare adverse defects.

Rhino- and nasopharyngitis were the most frequently diagnosed co-morbidities in patients at hospitalization, especially in children from 3 to 6 years old - 18 (33%) cases out of 54. Rhino- and nasopharyngitis occurred in 25 of 81 patients with associated diseases in all age groups. The second place was occupied by gastrointestinal and gastrointestinal tract diseases. Thus, the number of patients with this pathology was 12 (15% of the total number) out of 81 hospitalized patients. With acetonemia syndrome, often caused by viral infections, unhealthy eating, overeating, and psychomotor stress, 10 children out of 81 were registered. Also, one of the causes that could cause pneumonia-like complications was a UTI of various localization, which occurred in 8 (10%) of the 81 children admitted to the hospital.

The number of patients in whom pneumonia occurred in an uncomplicated form was 20 out of 178 hospitalized patients. The most frequent complications occurred in the age group 7-14 years old and were represented by pleurisy.

Given the relevance of the problem to the significance of the consequences of pneumonia, timely and evidence-based laboratory diagnosis is of particular importance. The greatest diagnostic value in the diagnosis of pneumonia is the symptom complex: tachypnea, body temperature greater than 37.8°, shortened percussion sound, presence of bronchophonia, leukocytosis greater than $11.0 \times 10^9 / l$, and in bacterial pneumonia over $20 \times 10^9 / l$.

Considering the microbiological causes of lung pathology, identification of the organism is one of the diagnostic tasks. ELISA, PLR and latex agglutination are the most frequently used methods. In addition, the determination of the susceptibility of microorganisms to antibiotics is the main approach to prevent the development of disorders in children and the formation of antibiotic resistance.

Conclusions. Thus, children aged 3-6 years and 7-10 years are most often affected by pneumonia.

The incidence of opportunistic pathology among the patients was 49% of the total number of patients. The highest number of opportunistic infections occurred in children aged 3 to 6 years (38 cases - 47%), the lowest - in children 15 to 18 years (6 cases - 7%). Rhino- and nasopharyngitis were the most frequent of the opportunistic infections recorded at hospitalization, especially in children from 3 to 6 years old, 18 (33%) cases out of 54.

The most accurate microbiological methods are ELISA, PLR-diagnostics and latex agglutination.

DIAGNOSIS OF PATHOMORPHOLOGICAL CHANGES IN THE KIDNEY IN HYPOTHERMIA

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Introduction. Diagnosis of fatal cold injury is a complex national problem of modern forensic medicine and, despite the long history of its study, continues to be complex and necessary for forensic medicine and for all theoretical and practical clinical medicine. The pathomorphology