of specific anti CMV IgM and IgG (ELISA test) in serum and CMV DNA in serum or urine by means of PCR were confirmed in diagnosing CMV infection.

**Results**. The study results proved the presence of high risk perinatal factors for antenatal fetal infection in over 53% of pregnant women: area of origin, low socioeconomic level, previous abortions or mortality cases, infections during pregnancy, premature births in medical history. The current gestation ended with premature birth in 10 (23%) cases, 12 cases of born at term infants (35.5%) showed retarded intrauterine development. The clinical features of congenital CMV infection was multiformelike. The reason for hospitalization was neurological, pulmonary and liver impairment. Neurological examination revealed the presence of a neuro-psychological retardation of varying degrees in 21 (50%) cases, periventricular calcifications in 10 (23.8%) children, microcephaly in 5 (12%) children. Liver damage was characterized by hepatosplenomegaly and cytolisis in 2/3 of children. The ophthalmologic examination revealed chorioretinitis in 5 (12%) children and optic nerve atrophy in 2 children. One child was diagnosed with sensorineural deafness. Most children suffered from interstitial lung- pneumonia. The disease diagnosis was confirmed by the presence of CMV-DNA in the serum of 7 children out of 11 investigations and DNA in the urine of 10 children out of 11 investigated ones. The serologic test results were positive for CMV IgM antibodies in 23 (55%) cases and anti CMV IgG in 27 (64%) cases.

**Conclusions.** According to the survey, more than 53% of cases resulted from pathological pregnancies. Interstitial pneumonia, hepatomegaly and cytolisis, periventricular calcification and microcephaly, chorioretinitis and optic nerve atrophy were the most common clinical manifestations of congenital CMV infection. The serologic positive results confirmed the diagnosis by presence of CMV IgM and IgG antibodies and CMV DNA in serum or urine.

**Key words:** CMV congenital infection, hepato-splenomegaly, intracranial calcifications, chorioretinitis.

## 80. RESULTS OF THE STUDY OF INTESTINE BIOCENOSIS IN CHILDREN

## A.A. Kvashnina, O.V.Dzhagiashvili, R.R. Chumak

Department of Surgery № 2 with the course of pediatric surgery, Odessa National Medical University, Odessa, Ukraine

**Introduction.** Changes in intestinal microbiocenosis play an important role in the development of functional disorders of the digestive tract in children. The aim of the study was to determine the diagnostic value of bacteriological studies of intestinal dysbiosis.

**Patients and methods.** We performed a retrospective analysis of 127 results of fecal survey on dysbiosis in children aged 1 to 17 years with impaired bowel function, that turned to the Odessa Regional Children's Clinical Hospital in 2014-2015.

**Results.** According to our research, more of the analysis on dysbiosis was conducted in patients of younger age group of 1 to 3 years — 68,8% of all cases. In the same age group, 81.4% examinationed children were bacteriological signs of dysbiosis of transient nature. There was a seasonal correlation of the research, since 44.8% of analyzes were carried out in the period from February to April, due to an increase in functional disorders of the digestive tract in children during this period. For the majority of

patients (78.6%) fecal dysbiosis has been performed in occasion of functional disorders of the gastrointestinal tract. The most common conditional pathogens St. Aureus were detected in the youngest age groups: from 1 year up to 3 years — at 44.2%; 4 to 7 years old children — 42,3%. On the second place were sown fungi of the genus Candida and other yeast in 38.6% of patients, as well mainly in young children. On the third place - E.cloaceae (11,02%) and lactosonegative (10,8%) Escherichia, then Kl. Pneumoniae 9,4%, P.aeruginosa in 2.36% of patients, respectively. The remaining microorganisms disembarked in single cases. Results of analyzes, unfortunately, were ready on day 10, when was advanced clinical remission in patients and there was no need for a correction of infringements.

**Conclusions.** Violation of intestinal microbiocenosis is most characteristic for young children, is rarely correlated with clinical data and is transient. Are most commonly defined conditional Pathogens St.Aureus and fungi of the genus Candida. However, the diagnostic value of the study is reduced due to the timing of the tests.

**Keywords:** Intestinal microbiocenosis, pediatrics.

## 81. EFFECT OF INTRODUCING THE SCORE OF PREDICTION OF RISK OF UNFAVOURABLE FLOW OF NECROTIC PNEUMONIA ON CLINICAL OUTCOMES IN CHILDREN WITH BACTERIAL PNEUMONIA

## **D.A Samofalov**

Department of Surgery № 2 with the course of Paediatric surgery, Odessa National Medical University, Odessa, Ukraine

**Introduction**: Purulent destructive pneumonia, massive necrosis of lung tissue, is a serious, often fatal, complication of lobar infiltrative pneumonia. Improvement in treatment of children with bacterial pneumonia may result in potentially preventable complications. It is necessary to identify patients at risk with easy assessable signs which can predict the development of complications.

The goal of this study was to develop and validate available and effective Score for predicting the risk of development of necrotic complications of lobar pneumonia in children. The aim was to collect physiological data which were prior to development of purulent – necrotic complications.

Materials and methods: The study was performed in Odessa Regional Children's Clinical Hospital. 150 retrospective cases of lobar pneumonia by the period from 2010 to 2015 were analysed in the study. It was developed the Score of prediction of risk of unfavourable flow of necrotic pneumonia using simple algorithms based on observations that include history of previous hospitalizations, saturation (SatO2), volume of affected lung (X-ray findings), quantity of white blood cells (WBC), pH of pleural liquid and level of  $\gamma$ -globulins. Data sets for which outcome (i.e. development of necrotic complication or hospital discharge) could be identified were included to the analysis. Data was analyzed using the Statistical Package for Social Sciences (Version 10, SPSS Inc., Chicago, IL). For normally distributed data, results are given as means and standard deviations (SD). For non-parametric data, medians and interquartile ranges (IQR) are given. Unpaired t-tests were used to compare mean variables in control and intervention groups and the Mann–Whitney U-test to compare medians in non-parametric