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(Group 1 - over 55 years and Group 2 - younger 54 years).

Results: There were identified 6 families of Mycobacterium tuberculosis: Beijing, Latin American and Mediterranean (LAM), Haarlem, Ural / Uganda1, Siberian (S), Africanum and individual genome profile (GIP). The most frequent were: Beijing (60%), LAM (16,5%) and S (8,7 %). Other family profiles and individual genotypes ranged from 0.9% to 5.2%. Revealed 20 unique and 12 repeated VNTR-profiles. Strains of Mycobacterium tuberculosis were belonging to two groups: East Asian and Euro-American. There was no statistically significant difference in the number of isolates of Beijing, Siberian and LAM families depending on the age of patients. Among the Mycobacterium family Beijing was found a large cluster of 42435 (53 isolates), which was found in both groups (42.5% and 50% of isolates). Isolates of Haarlem family were more marked in group 1 (among older patients) and each of them had a unique VNTR-profile.

CHANGES IN IMMUNOGRAMME IN PATIENTS WITH CHLAMYDIA PNEUMONIA

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Topicality. Infectious diseases caused by Chlamydia are widespread, especially Chlamydia pneumonia. Pathogenic mechanisms, immunogenesis, diagnostics, and treatment of Chlamydia pneumonia are not well-known and debatable.

Purpose of research - to study the features of children immune system in Chlamydia pneumonia.

Materials and methods. Clinical laboratory examination of 26 3 months - 3 years old patients with Chlamydia pneumonia and 21 healthy children at the same age (control group) has been completed.

We used clinical epidemiological information, results of the X-ray of lungs, markers of Chlamydia infection by ELISA and PCR in the sputum and in the blood to verify diagnosis. Levels of leukocytes, lymphocytes (CD_3 CD_4 CD_8 CD_{20}), and immunoglobulins (IgA, IgM, IgG) were determined.

Results of research. There are changes of levels of immune cells in patients with Chlamydia pneumonia in comparison with control group. We detected decrease level of T-cells. Level of B-cells wasn't changed. Quantity of leukocytes was higher in patients with Chlamydia pneumonia than in patients of control group. Immunoglobulins IgM was increased significantly, but immunoglobulins IgG and IgA were increased unreliably.

Conclusions. Our investigation determined that the immunological indexes were changed in patients with Chlamydia pneumonia. We suspect that these immunological abnormalities are one of the reasons of Chlamydia pneumonia prolonged course.

SERUM ZINC LEVELS IN CHILDREN SUFFERING FROM SHIGELLOSIS AND INFECTED WITH HELICOBACTER PYLORI

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Purpose of the study is assessment of serum levels of zinc in children suffering from Shigellosis, infected with H. pylori. The study enrolled 89 children aged from 1 to 3, who were hospitalized in Regional children's infectious diseases hospital (Kharkiv) and diagnosed with

Shigellosis. All children underwent additional examination aimed to detect presence of Helicobacter infection. Presence of H. pylori in the stool was detected by means of PCR technique and immunoenzymometric CITO TEST H.Pylori Ag. Besides, zinc content in blood serum of all children was studied in acute period of the disease and in period of early reconvalescence. The children were divided into two groups: Group 1 (21 children) represented by patients with Shigellosis with confirmed infection with H. pylori and Group 2 (68 children) made up by patients with Shigellosis infection without laboratory markers of Helicobacter infection.

It was revealed that the levels of Zn in blood serum of children suffering from Shigellosis in acute phase of the disease without regard to presence of background Helicobacter infection are significantly lower than similar indices of apparently healthy children: 9.5±0.56 and 11.27±0.36 mcmol/l in Group 1 and Group 2 respectively in comparison with 12.32±0.35 mcmol/l of the control group, $p<0.05$. Such changes can be explained due to the factor of early phase of acute inflammatory response which is accompanied by decreased concentration of serum Zn. In addition, zinc content of blood serum of the patients infected with H. pylori was significantly lower than that one in the patients of Group 2 (9.5±0.56 in comparison with 11.27±0.36 mcmol/l, $p<0.05$).

Comparing Zn content in children without background infection in the period of reconvalescence with similar data of the control group (12.16±0.33 and 12.32±0.45 mcmol/l), significant difference of indices was not revealed, $p>0.05$. The substantial difference of zinc levels between patients with Helicobacter infection and control group (9.8±0.49 in comparison with 12.32±0.45 mcmol/l, $p<0.05$) as well between the patients of experimental groups (9.8±0.49 in comparison with 12.16±0.33 mcmol/l, $p<0.05$) was observed. Analyzing dynamics of content of microelements of blood serum in children suffering from Shigellosis, in the process of infectious course the following data were revealed. In spite of slightly increased concentration of zinc in patients with Helicobacter infection in the period of reconvalescence of Shigellosis (9.8±0.49 in comparison with 9.5±0.56 mcmol/l), it did not reach the values in healthy children (9.8±0.49 in comparison with 12.32±0.45 mcmol/l, $p<0.05$). In the patients of Group 2 zinc content in the period of reconvalescence tended to be increased in comparison with indices of acute phase (12.16±0.33 in comparison with 11.07±0.36 mcmol/l, $p<0.05$) and was not significantly different from the indices of the control group (12.16±0.33 in comparison with 12.32±0.45 mcmol/l, $p>0.05$). Decreased indices of zinc content in the period of reconvalescence (especially in the patients of Group 1) can be indicative of impaired absorption as well as redistribution of Zn between plasma and mucosa, which is typical for Helicobacter infection.

Therefore, assessment of zinc content of serum in the children suffering from Shigellosis is indicative of significant disorders in the system of microelement homeostasis in acute phase. Prior to the period of early reconvalescence, substantial increase of content of microelement occurs, but in children, infected with H. pylori, complete restoring of Zinc level is not observed. The data, which have been obtained, represent complicated dynamics of restoring processes with absence of full recovery of functional features of GI tract in children infected with H. pylori, despite regression of clinical manifestations of Shigellosis and can be used for further improvement of treatment provided for such category of patients. The data which have been obtained are the ground for reasonable application of Zn-containing medical agents in combined therapy of Shigellosis in children with Helicobacter infection.

Відповідальність за зміст повідомлень несуть автори