

**SCREENING FOR TOXOCARIASIS OF PATIENTS WITH ALLERGIC DISEASES****M.D. Akhmedova, M.B. Ibragimov, J.A. Anvarov***Tashkent medical academy*

Toxocariasis is a disease of humans caused by larvae (immature worms) of either the dog roundworm (*Toxocara canis*) or the cat roundworm (*Toxocara cati*). Toxocariasis is often called visceral larva migrans. This zoonotic, helminthic infection is a major cause of blindness and may provoke rheumatic, neurologic or asthmatic symptoms. Humans normally become infected by ingestion of embryonated eggs from contaminated sources (soil, fresh or unwashed vegetables).

Diagnosis of toxocariasis is difficult in view of polymorphism and uncertainty of clinical manifestations. Clinical manifestations of toxocariasis do not have their own specific features, complicating the diagnosis of the disease. Patients often focus doctor's attention on previously established diagnosis: bronchial asthma, atopic dermatitis and other. Eosinophilia is often severe and sometimes represents the only sign of infection, except in ocular and neurological forms. Therefore, a key role in diagnosis belongs to laboratory methods of diagnostics.

The object. Optimization of diagnosis of toxocariasis among high risk groups.

Materials and methods. 30 patients aged 21 to 55 years (men - 17, women - 13) were under our supervision. 19 of them were in the in-patient Department of the specialized allergological center, 11 patients were treated in outpatient clinics allergological center and Republic infectious diseases clinic. We have examined for toxocariasis 30 patients with chronic allergic diseases (bronchial asthma, urticaria, atopic dermatitis), and patients with high level of eosinophils of unknown etiology.

During the study all the patients were carefully analyzed for the history of the illness, accent has been made on epidemiological anamnesis. Collecting epidemiological history we asked about the presence of an animal in the house, especially the dogs and the presence of pietism (geophagia). Clinical and laboratory examination were carried out.

Serological testing for toxocariasis was performed at the laboratory of immunology of parasites, by using ELISA test system "Toxocara-strip".

Results. Positive results were received in 14 patients from 30 examined patients. The frequency of major clinical manifestations of toxocariasis was presented as follows: manifestations of allergic skin rash - 7 (50,0%), astheno-vegetative syndrome - in 11 (78,5%), intoxication syndrome - in 10 (71,4%), pulmonary syndrome in 5 (35,7%), enlargement of lymph nodes - 4 (28,5%), alopecia in 1 (7,1%). In peripheral blood eosinophilia were found in 13 (92,8%) patients.

Conclusion. Based on epidemiological analysis it was established that the key risk factors for infection with *T. canis* are existence of geophagia and/or contact with a dog (79%). The range of clinical variants of toxocariasis course varies to a great extent. These data coincide with the literature data. The most frequently toxocariasis was diagnosed in patients with allergic skin rash (50,0%), astheno-vegetative syndrome (78,5%), intoxication syndrome (71,4%) and high titers of antibodies to *T. canis*.

**THE CORELATIONS BETWEEN IMMUNOGRAM PARAMETERS IN THE PATIENTS WITH CHRONIC VIRAL HEPATITIS C****U.P. Nabieva, T.A. Agzamova***Institute of immunology of the Academy of Sciences of the Republic of Uzbekistan,  
Tashkent pediatric medical institute*

The wide prevalence of hepatitis C virus among the population, prediction to chronic process, frequent development of the liver cirrhosis and hepatocellular carcinoma as well as variability of immune responses make the problem of chronic hepatitis C one of the most important aspects in the area not only in the hepatology but also in the whole field of the internal medicine. The prolonged existence of the HCV in the human body is explained by its ability to survive under the conditions of strength and various immune

responses. Without providing of the complete virus elimination the immune system has significant effect on the development of HCV-infection.

The purpose of our investigation was to study correlations between immunogram parameters in the patients with chronic viral hepatitis C.

There were studied 35 patients with chronic viral hepatitis C (CVHC), mean age was 39,33±5,23 years. Out of 35 in 9 patients viral genome was PCR (-), in 26 patients – PCR(+). Immunological investigation was performed with use of monoclonal

antibodies (Manufactured in Moscow, Russia). The content of serum IgA, M, and G were measured by Mancini method. Circulating immune complexes (CIC) were revealed by method of precipitation with 3% and 4% solution of polyethylenglycole.

Results. In group of patients with PCR(-) there was observed direct high dependence of CD3 from CD4, CD8; CD25 from CD20, CD16; CD95 from CD8, IgG from CD4; 3% and 4% CIC. The direct moderate dependence: CD20 from the lymphocytes; CD23, CD16; CD8 from the lymphocytes, CD4, IgM, 3% and 4% CIC; CD16 from the lymphocytes, CD20; CD23 from CD20, CD4, 3% CIC; CD95 from the lymphocytes, CD23, 4% CIC; IgG from the L and lymphocytes, CD3,

CD23; IgM from CD3, CD23, 3% and 4% CIC. The inverse mean correlation: CD20 from the L and IgA and M; CD16 from the L and CD23; CD25 from the L, CD3, CD4; IgA from the lymphocytes, CD20, IgG; 3% CIC from the L and lymphocytes; 4% CIC from the L and IgG.

In group of patients with HCV(+) there were found direct high correlations between CD4 and CD3, CD8, CD25. The direct moderate correlations: CD8 and CD4, CD16; CD16 and CD20, IgA; CD25 and CD4, CD3, IgG, M; IgG and CD20; 3% CIC and CD95; 4% CIC and CD20, CD23, 3%. Moderate inverse correlations between: CD95 and the L, 3% CIC and CD16; 4% CIC and CD25, IgA.

## IMMUNOGENETIC FACTORS IN ADULTS AND CHILDREN WITH CHRONIC VIRAL HEPATITIS C INFECTION IN UZBEK POPULATION

E.U. Nazarov

*Tashkent medical academy*

Hepatitis C leads to severe liver damages and one of the indications to liver transplantation (according to WHO ~3% of worldwide population is infected by HCV infection.) The current standard of therapy of chronic hepatitis C (CHC) is pegylated interferon- $\alpha$  (PEG-IFN $\alpha$ ) in combined with ribavirin (RBV). The treatment achieves a sustained viral clearance in only approximately 50% of patients. Recent whole genome association studies revealed that single nucleotide polymorphisms (SNPs) around IL-28B have been associated with response to the standard therapy and could predict treatment responses at approximately 80%. According to 4 independent GWAS approaches have revealed the significant SNPs associated with response to PEG-IFN $\alpha$ /RBV therapy for CHC. These significant SNPs were found around IL-28B were rs12979860 and rs8099917 they showed the statistical significance in each study (M. Mizokami et al., 2011).

The purpose of research: To study genotypes of HCV infection and polymorphisms of gene IL28B circulation in adults and children with CHC in Uzbek population.

Materials and methods: We studied 40 patients with CHC which were divided in to two groups: children and comparative adults group each included 20 patients. Diagnosis CHC was established on the base of ELISA full marker specter with following revelations of HCV RNA and its genotype by PCR method. Gene IL-28B was determined in all patients by PCR method.

Results: Research which we conducted showed us variation of genotype of HCV infection. In adult group we determined genotypes 1a/b (61%),

2 (11%) non revealed genotype (5%) and 3a/b (22%) but there wasn't 4 (0%). In children group we exposed genotypes 1a/b (58%), 3a/b (32%), 4 (5%) non revealed genotype (6%) but there wasn't 2 (0%) genotype. Also we established genotype distribution of gene IL 28B in adults and children. We found that most prevalent genotype in the adults group was combination of C/C (rs12979860) and T/T (rs8099917) (C/C T/T -45%) polymorphisms with good prognosis in both lines (European and Asian lines). Whereas in children group we found out that most prevalent genotype was C/T (rs12979860) (not as favorable as C/C European genotype) and T/T (rs8099917) (C/T T/T- 35%). In addition, adults revealed genotypes of gene IL28B T / T (rs12979860), and T / T (rs8099917) (T/T T/T-5%), that is not favorable by European line and favorable by Asian line, as well as genotype C / C combined with T / G genotype (C/C T/G-5%). In children we detected T / T + G / G (5%) which has very low therapy prognosis.

Conclusions:

1) The most prevalent genotypes of HCV in region of Uzbekistan was 1a/b (61% in adults and 58% in children) and 3a/b (22% in adults and 32% in children).

2) Interestingly that genotype 2 (11%) was not exposed in children group but was determined in adults group and conversely genotype 4 (5%) was detected in the children group unlike adults group.

3) In Uzbek population we found both favorable genotypes of gene IL 28B and very poor genotypes, so there were differences among adults and children in the distribution of polymorphisms of IL28B.