

INCIDENCE OF DIFFERENT IL-28B POLYMORPHISMS IN PATIENTS WITH CHRONIC HEPATITIS C IN THE REPUBLIC DAGESTAN

Mammaev S., Ramazanov Sh., Balamirzaeva R.,
Adzhimusaeva L., Muskhadzhiyev A.

Dagestan State Medical Academy, Ministry of Health, Makhachkala, Russia,
Medical center «Hepar», Makhachkala, Russia

Objective: It is the first study of genetic polymorphism of IL-28B gene in patients with chronic hepatitis C (CHC) in the Republic of Dagestan. Polymorphism of IL-28B gene is sensitive and specific enough for predicting the effectiveness of antiviral therapy, but also allows selecting patients for shorter courses of treatment.

Purposes: To determine prevalence of SNPs in IL-28B gene (loci rs12979860 and rs8099917) in patients with chronic hepatitis C genotype 1.

Material and methods: Sixty four patients with chronic hepatitis C genotype 1 aged 19 to 62 years (mean age $35,6 \pm 10,5$, 36 men and 28 women) were enrolled in the study. Polymorphism of IL-28B gene (locus rs12979860: alleles CC, CT, TT; and locus rs8099917: alleles TT, TG, GG) was studied using the real-time polymerase chain reaction in the laboratory of Medical center «Hepar» («DNA technologies» test systems, Russia).

Results: A genotype 1b HCV was revealed in all studied patients. According to IL-28B genotype patients were distributed as follows: CC alleles in 12 (64), CT 20 (64), TT in 32 (64) in locus rs12979860, and TT alleles in 12 (64), TG - in 40 (64), and GG - in 12 (64) patients in locus rs8099917. The prevalence of favorable CC/TT-genotype was 19%.

Conclusions: study of gene IL-28B polymorphism is relevant and necessary to predict the effectiveness of standard antiviral therapy of CHC. The prevalence of IL-28B genotype (CC, CT) with a high probability of effective antiviral therapy is low in the Republic of Dagestan.

HCV REACTIVATION IN A PATIENT WITH DIFFUSE B-MAGNOCELLULAR LYMPHOMA

¹Melnikova L.I., ²Zubkov Yu.P., ²Zarkov K.A.

¹FSBI «CMSP №165» FMBA of Russia, Moscow;
²FSBI «IPVE named M.P. Chumakov» RAMN, Moscow, Russia

Aim. To describe case of HCV reactivation in patient with diffuse B-magnocellular lymphoma (DBML) on cytotoxic therapy.

Clinical observation. Patient P., 40 years old, veterinary. There is period of injecting drug use in patient's history. The appearance and gradual increase of weakness is noted since 2010. Medical care is not addressed. There were pains in the right hypochondrium in April 2012. There are mass of subhepatic space (12x10 cm), spleen (5 cm) and lymphadenopathy (lymph nodes up to 2 cm in diameter) of the abdominal cavity in examination (ultrasound, CT). Due to the location of the tumor in the portahepatis and its possible compression of the bile ducts and vessels, removal of tumor and extended anatomic resection S1 (+7,8S) were conducted. DBML, terminal type with high proliferative activity was diagnosed by immunohistochemical study. No anti-HCV and HBsAg were detected by ELISA in the serum. To suppress tumor growth by R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine, prednisolone), 4 courses of chemotherapy were made, increase of ALT and AST activities up to 1,5N from the upper boundary and GGTP – up to 30N were estimated. Anti-HCV and HCV RNA were identified in the serum. Genotype HCV 1b was determined. Viremia level was reached up to 780,000 IU/ml. No HBsAg and HIV were detected. GGTP activity was decreased from 1,100 U/l (normal - 35 U/L) to 440 U/l after ademetionine course. To treat HCV- infection combined antiviral therapy (AVT) - interferon alfa-2a at a dose 3 million IU every other day subcutaneously in combination with ribavirin 1000 mg/day (weight - 45 kg) was started. After 12 weeks of AVT, decrease of viremia level on 2 log and normalization of ALT and AST activities were estimated. Patient was sent to hospital for further treatment of the underlying disease.

Conclusion. Feature of clinical case - HCV reactivation during chemotherapy with rituximab. AVT contributed to the development of partial early virological response, clinical remission, which allowed continuing further specific treatment DBML.

CLINICAL-LABORATORY CHARACTERISTICS OF PARENTERAL VIRAL HEPATITIS OF PATIENTS WITH COMBINED PATHOLOGY OF HIV/TUBERCULOSIS IN PRISON ORENBURG

Mikhaylova N.R.

Orenburg State Medical Academy, Orenburg, Russia

Purpose of study: To evaluate the clinical - laboratory features of patients with chronic hepatitis C with combined pathology of HIV/tuberculosis.

Materials of study: 20 analyzed records of patients with combined pathology of HIV/tuberculosis and chronic hepatitis C that are receiving medical treatments in the prison (IK#4). Clinical methods included collection of anamnestic and objective data. Laboratory studies included determination of the presence of markers of hepatitis C, B by IFA method; RNAHCV by PCR method, blood chemistry (ALT and AST); CD4 lymphocytes.

Results of study: 20 patients with combined pathology of HIV/tuberculosis are men aged 24 to 46 years (34.4±5.8). All patients had pulmonary tuberculosis, one patient additionally had tuberculosis meningitis. The rationale for screening for viral hepatitis was clinical and epidemiological evidence. 85% of cases represented infection by the parenteral route. Patients did not get antiviral therapy of hepatitis, 13 patients (65%) were on antiretroviral therapy. In 53.5% of cases with chronic hepatitis C there were observed minimal and mild degree of activity. Studies showed that often the clinical picture of CHC was characterized asymptomatic. 51.5 % of patients did not present their health problems, 48.5% of patients presented minor complaints. More often the patients complained about weakness (80%), pain in the right upper quadrant (60%), nausea (10%), decreased appetite (35%). Enlargement of the liver was detected in 14 cases (70%), splenomegaly was not registered in any case. Chronic viral hepatitis C was detected in 17 cases (85%), HBsAg was negative in all cases. There was observed ALT increase by 1.5 times 62.7 ± 7.9 u/l, AST – 63.1 ± 7.9 u/l. All patients had a high viral level of RНКHCV $6,911,234 \pm 2,628.9$ IU/ml. Immunodeficiency was detected in 8 cases, in 12 patients average level was 434.3 ± 20.8 cells/ml.

Conclusion: The findings suggest the need for screening of patients in prisons for early diagnosis of chronic HCV-infection. Given high viral level it is necessary to carry out standard antiviral therapy.

BIOCHEMICAL MANIFESTATIONS OF LIVER AFFECTION IN PATIENTS WITH INFECTIOUS MONONUCLEOSIS

Mohylenets O.I., Kozko V.M., Merkulova N.F., Bondarenko A.V.,
Solomennik G.O., Iurko K.V., Nikitina V.V., Vinokourova O.M.

National Medical University, Kharkiv, Ukraine

Aim – to study the biochemical manifestations of liver affection in patients with infectious mononucleosis (IM).

Materials and Methods. We observed 47 patients with IM. From them 28 were men (59,6%) and 19 – women (40,4%). The average age of patients was $23,94 \pm 1,08$ years. The diagnosis was based on clinical and laboratory data, results of imaging studies according to generally accepted in clinical practice criteria. Etiological diagnosis was conducted by the detection of Epstein-Barr virus (EBV) and cytomegalovirus (CMV) antibodies by the method of immunofluorescence analysis, plus the detection of their DNA in the blood serum by the method of polymerase chain reaction. To exclude viral hepatitis determination of anti-HAV IgM, HbsAg and anti-HCV IgG was done. Presence of cytolytic syndrome was determined on the basis of determination of alanine aminotransferase (ALT) and mesenchymal-inflammatory syndrome – of thymol test.

Results. Increased ALT was observed in 81% of individuals; thymol – in 50%, the simultaneous increase in both indexes – in 50%. The median ALT was $2,5 \pm 0,33$ mmol/(l-h), thymol – $5,2 \pm 0,59$ units. Manifestations of cytolytic and mesenchymal-inflammatory syndromes in men and women had the same frequency ($p < 0,05$). A more pronounced increase in ALT levels were observed in patients with IM caused by mixed infection EBV+CMV. The highest levels of thymol were determined in a group of patients with IM of EBV-etiology. The lowest were in patients with CMV-IM. The difference between groups was not significant ($p < 0,05$).

Conclusions. There are manifestations of hepatitis as a moderately expressed cytolytic syndrome – in the majority of the patients with IM and mesenchymal-inflammatory syndrome – in half of the patients. There is no significant difference between the indices of ALT and thymol test in relation to gender and etiology.