

RESULTS OF ANTIVIRAL THERAPY OF HAEMODIALYSIS PATIENTS WITH TERMINAL CHRONIC RENAL FAILURE AND CHRONIC HEPATITIS C

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The aim is to study efficacy of combination antiviral therapy (AVT) using alpha-fetoprotein (AFP) in hemodialysis patients with chronic hepatitis C virus (CHCV) with terminal chronic renal failure (TCRF).

Material and methods: to prepare patients for the kidney transplantation there were held combined AVT for 5 hemodialysis patients with CHCV and TCRF. Hemodialysis was performed 3 times a week; the average duration of program dialysis was 4 years. All patients were males aged 47±5 years with 2 or 3 HCV genotypes with moderate and high viral load with minimal and moderate activity. All patients 2-3 hours after the dialysis for 6 months underwent AVT with interferon (IFN) α-2b «Reaferon-EC» with the dosage of 3 million IU 3 times a week in combination with the alpha-fetoprotein on the appropriate dosage.

Results: analysis of clinical and laboratory research in the dynamics showed positive results in all patients treated. We have observed normalization of biochemical parameters, there was a reduction of hepatomegaly on ultrasound examination. On PCR all patients had a rapid and early virological response (VR). In 3 patients were stable VR, and in the remaining 2 patients we still observing after AVT. All patients underwent AVT without any serious side effects. In 3 patients after stable VR the kidney transplantation were done. The postoperative period was without any complication and recurrence of HCV was not observed.

Conclusions: this antiviral therapy using a short-IFN α-2b in combination with alpha-fetoprotein has proved highly effectiveness in patients with chronic hepatitis C (genotype 2 or 3) and terminal chronic renal failure without serious side effects.

SERUM MICRORNA IN CHRONIC HEPATITIS C

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Purpose. To estimate correlation between serum 16-5p, 199a-5p, 196-5p, 491-5p and 122-5p microRNA level and some markers of hepatitis C activity after treatment with Binnoferon (3 mln IU three times a week) and Rebeto1 (1000 mg per day).

Methods. We recruited 43 subjects. Among them 12 patients (27.9%) were with chronic hepatitis C (CHC) without cirrhosis, 11 patients (25.6%) with SVR after antiviral treatment, 10 patients (23.3%) with noneffective antiviral treatment (SVR-) and 10 almost healthy subjects (23.3%). To measure microRNA level 1 ml of blood was centrifugated and total microRNA was precipitated. Reaction of reverse transcription and real time PCR using Exiqon kits (Denmark) were performed. Correlation was evaluated by Pearson correlation coefficient.

Results. We analyzed correlation between 16-5p, 199a-5p, 196-5p, 491-5p and 122-5p microRNA and serum HCV RNA level, ALT and fibrosis stage. No correlation between 16-5p, 199a-5p, 196-5p, 491-5p micro RNA and HCV RNA was found. We detected a correlation between 122-5p microRNA and HCV RNA level ($r=0.725$; $p>=0.01$ N=29). Also we determined a correlation between 122-5p microRNA and ALT level ($r=0.580$; $p>=0.01$ N=30). No correlation between 122-5p microRNA and fibrosis stage was detected.

Conclusion. Serum microRNA-122 level can be used for assessment of hepatocytes pathology and can reflect viral activity in patients with chronic hepatitis C.

SERUM TRANSFORMING GROWTH FACTOR-β3 LEVEL AND CYTOLYSIS IN HCV-INFECTED PATIENTS

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Purpose: to examine serum transforming growth factor-β3 (TGF-β3) level in HCV-infected patients in association with cytolysis degree.

Methods: We performed a complex clinic-laboratory examination of 81 treatment-naive HCV-infected patients (56 females and 25 males), 23-60 years old with mean age 44.4±9.9 years. HCV was determined by enzyme immunoassay (EIA) and PCR. TGF-β3 level was measured using enzyme-linked immunosorbent assay kits (R&D Diagnostics Inc., USA) with sensitivity 1 pg/ml. Control group consisted of 22 healthy volunteers, 20-55 years old, with mean age 38.4±11.04 years. Statistical analyses were performed using «Statistica 6.0» statistical package.

Results: ALT level was normal in 18 HCV-infected patients (22.2%), 2-3 times increased in 43 (53.1%) recruited patients and three times higher upper limit in 20 (24.7%) patients. Mean TGF-β3 level in patients with normal ALT was 39.2±5.3 pg/ml, in patients with 2-3-fold ALT elevation - 27.3±2.8 pg/ml and in patients with ALT three times higher upper limit - 21.4±1.7 pg/ml ($p<0.05$). It should be noted that TGF-β3 level was 3.5 times lower in patients with normal ALT in comparison with controls (39.2±5.3 pg/ml vs 131.6±7.3 pg/ml, respectively, $p<0.001$). Nevertheless, we couldn't find any significant correlation between TGF-β3 and ALT level ($r=-0.37$, $p=0.331$).

Conclusion: We revealed a decrease of serum TGF-β3 level in HCV-infected patients with cytolysis. To our opinion, our results demonstrate that TGF-β3 acts in HCV-infection not at the systemic, but at the local level, in the target organ.

THE LOCATION OF EXTRAHEPATIC MANIFESTATIONS IN THE CLINICAL PICTURE OF CHRONIC HCV-INFECTION

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HCV-infection plays a special role in the development of extrahepatic symptoms caused by a broad spectrum of organ lesions and features of clinical course - from latent forms to severe syndromes and holistic diseases. According to various studies, their frequency has significant differences in different countries from 38 to 74%.

Aim of the study - to determine the incidence of extrahepatic symptoms in the clinical picture of chronic HCV infection at this stage.

Object and methods. The study involved of 206 patients with chronic hepatitis C. Along with the confirmation of the etiologic diagnosis the program of general clinical examination included assessment of complaints and anamnestic data, physical examination, study of the functional state of the liver through routine biochemical tests and systems FibroMax, as well as consultations of interfacing specialists.

The results of the study. First became aware of HCV infection more than 60% patients at the stage of chronic process. Almost a quarter (24.75%) patients suffered from arthritis, 2.44% - allergic dermatitis, 1.45% - hypochromic anemia, 0.48% - psoriasis for several years before diagnosis. Repeated treatment of these conditions in a specialized hospital does not have a positive effect. Analysis of the clinical data of patients in an infectious hospital revealed the prevalence of hepatomegaly (100%), asthenovegetative (75.24%) and dyspeptic (69.9%) syndromes. Extrahepatic manifestations (arthralgias, allergic dermatitis, anemia, psoriasis) 29.12% were observed in patients. Against the background of combined antiviral therapy had complete or partial regression the studied symptoms.

The conclusion. At the present stage for chronic HCV infection is characterized by a predominance of classical (liver) symptoms above extrahepatic manifestations total structure of clinical disease.