## COMPARISON OF "ALGERON" AND "PEGINTRON" EFFICACY TRIAL IN CHRONIC HEPATITIS C

**Pirogova I.Yu.**
*Medical Center «Lotos», Chelyabinsk, Russia*

**Purpose:** to assess efficacy and safety of Russian-made pegylated Interferon "Al-geron" (PEG-IFNa2b) compared to foreign "Pegintron" (PEG-IFNa2b), ability to induce RVR and EVR.

**Methods:** 60 patients were randomized into two groups, compared by gender, age, disease stage, biochemical activity, 1 and 3 genotypes ratio, IL28B-mutations (C/C polymorphism dominated in region rs12979860, T/T polymorphism – in region rs8099917, other patients were offered a triple therapy). 30 patients received treatment with "Algeron" 1.5 mkg/kg with Ribavirin (Group I), other 30 patients were administered "Pegintron" 1.5 mkg/kg with Ribavirin in standard doses (Group II). EVR and RVR, biochemical markers, virological response at the end of treatment, SVR, treatment safety and fibrosis stage after treatment were assessed.

**Results:** In Group I RVR rate in GT1 patients reached 72%, in GT3 – 84%; in Group II – 70% and 82%, respectively. EVR rate in both groups in GT1 and GT3 was 100%. Virological response at the end of treatment was assessed in 78% of patients and in all cases it was 100%. Biochemical response was achieved at the week 12 in all patients. Fibrosis stage was evaluated in patients with EVR, RVR and virological response at the end of treatment. F1 fibrosis by liber elastometry was detected in both groups. Adverse events were flu-like syndrome (80 and 85% in group I and II), asthenia (35% and 39%, respectively), depression (7% and 4%, respectively), alopecia (75 and 6%, respectively) without any significant differ-ence. There were no severe adverse events, requiring treatment discontinuation.

**Conclusion:** To achieve a high efficacy of antiviral treatment with pegylated Inter-feron and Ribavirin, a correct patients' selection, according recommendations, is needed. Use of domestically made pegylated interferon "Algeron" allows to in-crease a number of patients with successful antiviral treatment, including EVR, RVR, virological response at the end of treatment, biochemical response and fi-brosis stage regression.

## CORRELATION BETWEEN BIOCHEMICAL MARKERS AND METABOLIC SYNDROME IN PATIENTS WITH CHRONIC HEPATITIS C (HCV RNA+)

**Golik O.O., Popova L.L., Suzdaltsev A.A.**
*State Medical University, Samara, Russia*

**Purpose:** to study biochemical markers (ALT, AST, GGT, glucose, total bilirubin) in patients with chronic hepatitis C (CHC) (HCV RNA+) and nonalcoholic steato-hepatitis (NASH) depending on metabolic syndrome (MS).

**Methods:** We monitored 140 patients with CHC and NASH, 25-48 years old, who were ill for 2-8 years. CHC was verified by clinical, laboratory and instrumental methods. MS was diagnosed based on criteria of the International Diabetes Federation. Patients were randomized into two groups. Group I (n=75) included patients without MS, group II (n=65) – patients with MS.

**Results:** Mean ALT level was 113±5.56 U/l in group I and 127.34 ±6.15 U/l in group II. AST level didn't differ significantly in both groups and was not higher than 1.5-3 ULN. Its mean value was 97.34±3.68 and 89.05±4.25 U/l, respectively. GGT level was insignificantly higher in patients with MS (with mean value 91.78± 2.80 U/L) than in patients without MS (mean value 79.20±2.00 U/l) (p=0.05). Fasted glucose concentration was significantly higher in group I patients compared to group II patients (5.75±0.14 and 4.66±0.07 mmol/l, respectively, p<0.001). Total bilirubin level was not higher reference range and didn't differ between groups. Conclusion: Comparing ALT, AST, GGT, glucose and total bilirubin level between patients with CHC with and without MS, we revealed a significant higher serum glucose and GGT level in patients with MS.

## CORRELATION BETWEEN HYPERHOMOCYSTEINEMIA AND LIPID PANEL IN PATIENTS WITH CHRONIC HEPATITIS C AND METABOLIC SYNDROME

**Konstantinova E.A., Konstantinov D.Yu., Popova L.L., Strebkova E.A.**
*Samara State Medical University, Samara, Russia*

**Purpose:** to estimate relationship between hyperhomocysteinemia (HHC) and lipid panel – cholesterol, low-density lipoprotein (LDLP), triglycerides (TG) in patients with chronic hepatitis C (HCV RNA+) and metabolic syndrome (MS).

**Methods:** 288 patients (161 males and 127 females, with mean age 38.1±2.3 years) were recruited. All patients were randomized into groups: group I (n=110) – HCV-infected patients without metabolic disorders, with BMI-19-23; group II (n=124) – HCV-infected patients with metabolic syndrome, with BMI – 25-32; group III (n=54) – HCV-free patients with metabolic syndrome, with BMI-25-32. Control group (group IV) included 52 donors with BMI-19-23. Homocystein (HC) level in venous blood was measured by enzyme immunoassay method using AxSYM analyzer (Abbot Laboratories S.A., Norway). Lipid panel parameters were determined using standard methods.

**Results:** Serum HC and lipid panel parameters level (with confidence intervals) in different groups are presented below.

| Group | HC mkmol/l | Cholesterol mmol/l | LDLP mmol/l | TG mmol/l |
|---|---|---|---|---|
| I | 21,11 (15,44-22,11) | 5,6 (4,59-6,66) | 3,42 (3,22-3,71) | 2,11 (1,69-2,44) |
| II | 23,25 (19,72-25,29) | 6,59 (5,81-6,84) | 4,16 (3,85-4,41) | 2,45 (1,88-2,96) |
| III | 20,01 (15,01-21,05) | 6,41 (5,32-6,61) | 3,96 (3,61-4,34) | 2,35 (1,81-2,96) |
| IV | 9,01 (7,88-9,77) | 4,51 (4,14-4,62) | 2,04 (1,85-2,41) | 1,33 (1,1-1,52) |

Cholesterol level differed significantly (by Wald–Wolfowitz test) between groups I and III (p<0.05), II and IV (p<0.05), III and IV (p<0.01). TG level differed (by Mann-Whitney U-test) between groups I and IV (p<0.01), II and IV (p<0.01), II and IV (p<0.01). LDLP level differed (by Wald–Wolfowitz test) between groups I and III (p<0.01), II and III (p<0.05), III and IV (<0.001). Besides that, HC level had a strong correlation with LDLP (r=0.91), cholesterol (r=0.85), TG (r=0.88), predominantly in patients of group II.

**Conclusion:** We revealed correlation between HC level and some parameters of lipid panel (cholesterol, LDLP, TG), predominantly in HCV-infected patients with MS.

## DIAGNOSTIC VALUE OF STATISTIC HEPATIC SCINTIGRAPHY IN DEFINITION OF CHRONIC HEPATITIS AND VIRAL CIRRHOSIS OF THE LIVER

**Kozko V.N.[1], Merkulova N.F.[1], Tkachenko V.G., Gradil G.I.[1], Solomennik A.O.[1], Lavrov P.D.[1], Paskevich O.I.[1], Wickman Y.E.[1], Vasiliev L.Y.[2]**
*[1] National medical university, Kharkiv, Ukraine*
*[2] S.I. "Grigoriev Institute for Medical Radiology of National Academy of Medical Science of Ukraine", Kharkiv, Ukraine*

Parenterally transmitted hepatotropic viruses remain one of the leading cause of chronic hepatitis (CH) and cirrhosis of the liver (LC). Due to use of modern high-informative diagnostic technique and methods of quantitative and qualitative valuation of liver parenchyma damage and also due to indication of liver viral aggression indexes considerable progress in viral CH and LC diagnostics has been made. In some cases these late stages of liver damage especially with moderate morphological and functional changes are not uniquely defined and that has an impact on treatment initiation time and prognosis of outcome.

Radioisotopic scintigraphy is based on phagocytosis of tagged colloidal particles by reticuloendothelial system (RES) cells of liver and spleen. These particles are inducted intravenously and the speed of their accumulation reflects the condition of intraorganic blood flow, the structure and function of organ.

16 patients with HBV, HCV, HDV-infection markers were observed (8 women and 8 men at the age of 26-67 years, average age 39, 9±11, 01 years ).

With gamma camera GKS-301T ("Tamara") liver and spleen were imaged with the registration of radiation of radiopharmaceutical technefit 99Tc ("Radiopreparat", Uzbekistan) selectively accumulating in these organs.

Scintigraphical signs of hepatic pathology were found in 12 (75%) patients: in 5 (31, 3%) of them there were moderate activation of spleen RES or diffuse liver disease signs, in 6 (37, 5 %) – nonuniform distribution of radiopharmaceuticals, in 4 (25%) – LC scintigraphical signs (in 2 patiens it was first diagnosed), particularly low-intensive fixation and nonuniform distribution of radiopharmaceuticals in liver were found in 2 (12, 5%) cases, splenomegaly and increase of radiopharmaceuticals fixation in the spleen was found in 3 (18, 8%) cases.