P1216
EFFICACY AND SAFETY OF SIMEPREVIR PLUS PEG-INTERFERON/RIBAVIRIN THERAPY IN PATIENTS WITH HCV GENOTYPE 1 – COMPARISON WITH TELAPREVIR PLUS PEG-INTERFERON/RIBAVIRIN THERAPY

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Background and Aims: Telaprevir (TVR)-based triple therapy is effective for hepatitis C patients. However, we have reported that TVR causes a reduction in renal function, with a reduction in the excretion of ribavirin (RBV), and the serum RBV concentration rises and the increased RBV concentration leads to hemolytic anemia (Y. Karino et al. J viral hepat. 2013). In this study, we retrospectively investigated the effects and adverse events of simeprevir (SMV)-based triple therapy in comparison with TVR-based triple therapy and PEG-INF/RBV therapy.

Methods: Twenty seven patients were assigned to SMV for 12 weeks along with PEG-INF/RBV for 24 weeks (Group A), while 65 patients were assigned to TVR for 12 weeks along with PEG-INF/RBV for 24 weeks (Group B) and 190 patients were assigned to PEG-INF/RBV for 48 weeks (Group C). SMV was administered at a dose of 100 mg (or 50 mg) per day for 12 weeks (or 24 weeks) and TVR was administered at a dose of 1500 mg or 2250 mg per day for 12 weeks. Results:

SVR24 rate was 85.2% in Group A, 84.5% in Group B, and 45.3% in Group C. Adherence to RBV was significantly lower in Group B (63.3%) than Group A (93.5%) and Group C (94.3%). Average hemoglobin level (g/dl) at weeks 0/1/2/4/8/12 was 14.1/14.0/12.8/11.5/11.3 in Group A, 13.8/13.6/12.4/11.2/10.1/10.0 in Group B, and 13.6/13.5/12.5/11.7/11.3/11 in Group C and average creatinine level (mg/dl) at weeks 0/1/2/4/8/12 was 0.70/0.68/0.67/0.67, 0.70/0.85/0.81/0.85, 0.69/0.69/0.66/0.65, respectively.

Conclusions: Simeprevir-based triple therapy resulted in less adverse events, higher adherence to RBV than telaprevir-based triple therapy, and high SVR24 rate.

P1217
EVALUATION OF PREDICTORS OF SUSTAINED VIROLOGICAL RESPONSE (SVR) TO INTERFERON THERAPY AND HEPATIC PROGENITOR CELLS (HPCs) IN CHRONIC HEPATITIS C VIRUS (HCV) INFECTED PATIENTS

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Background and Aims: Studying the predictors of SVR to pegylated interferon (PEG-INF) alfa-2a and ribavirin (RBV) therapy in chronic HCV infected patients is crucial for selecting those who would benefit most from therapy. Increased HPCs in HCV-infected patients were shown to be correlated with increasing liver fibrosis and response to treatment. HPCs could be detected in the liver by immunohistochemical expressions of cytokeratin (CK) 7 and CK19. This study aims to:

1. Evaluate the response rate to interferon based treatment in chronic HCV patients.
2. Detect the predictors of SVR to treatment.
3. Study the correlations between CK7 and CK19 expressions and treatment response.

Methods: This study included 483 chronic HCV infected patients who fulfilled the study criteria who underwent clinical, biochemical and virological assessments before treatment and at 12, 24, 48 and 72 weeks post-treatment. Only 330 patients; 193 male and 137 completed the course and were included in the statistical analysis. Only 50 specimens were examined for CK7 and CK19 expression using avidin, biotin, peroxidase technique.

Results: There was significant association between CK7 and/or CK19 expressions and grade of necro-inflammation ($P<0.033, 0.026$ respectively), and/or advanced stage of fibrosis ($P<0.001, 0.000$ respectively). There were significant inverse relations between SVR and stage of hepatic fibrosis ($P<0.001$), and CK19 expression ($P<0.000$).

Conclusions: HPCs as assessed by CK7 and CK19 expressions may be incorporated in assessment of treatment response of these patients.

P1218
STEATOSIS IN PATIENTS WITH CHRONIC HEPATITIS C VIRUS GENOTYPE 3 DOESN’T AFFECT THE OUTCOME OF PEGINTERFERON ALPHA-2A PLUS RIBAVIRIN TREATMENT

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Background and Aims: There are evidences that hepatic steatosis reduce response to antiviral therapy with peginterferon alpha-2a (PegIFNα-2a) plus ribavirin (RBV) in hepatitis C virus (HCV) infection genotype 1 but not in genotype 3. Aims of our study were to assess and compare the antiviral efficacy with PegIFNα-2a plus RBV in chronic HCV infection with genotype 1 and genotype 3 with and without liver steatosis.

Methods: 123 “naïve” patients with chronic hepatitis C treated with PegIFNα-2a plus RBV were included in the study. Steatosis was considered when ≥5% hepatocytes containing fat vacuoles on the histological examination. Response to antiviral therapy was measured by sustained virological response (SVR) defined as undetectable HCV RNA by polymerase chain reaction (PCR) 24 weeks after the end of treatment.

Results: From 123 patients 43 (34.9%) had steatosis. HCV genotype 1 was presented in 75 (61.0%), genotype 3 in 41 (33.3%), genotype 4 in 5 (4.1%) and genotype 2 in 2 patients (1.64%). Steatosis was registered in 21/41 (51.2%) patients with genotype 3, and 22/82 (26.8%) patients with non-3 genotype. SVR achieved similar SVR to group of patients without steatosis with all genotypes. SVR was achieved in 17/21 (81.8%) patients with genotype 3, 14/14 (100%) patients with genotype 1 and genotype 3 with and without liver steatosis.

Conclusions: Steatosis in patients with HCV infection genotype 3 achieved similar SVR to group of patients without steatosis with all genotypes. Steatosis in patients with genotype 3 hepatitis C doesn’t affect the outcome of PegIFNα-2a plus RBV treatment.

P1219
IMPACT OF IL-28B GENE POLYMORPHISM ON INTRAFAMILIAL TRANSMISSION, AND RESPONSE TO TREATMENT OF HCV.

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Background and Aims: Recently, several studies have suggested the important role of (IL-28B) gene polymorphism in spontaneous clearance of the virus and in treatment outcomes. Moreover its role in exposed uninfected individuals was studied. Family members of HCV infected patients are at increased risk of infection. So, the study aimed to evaluate the role of IL-28B gene polymorphism in intrafamilial transmission as well as in treatment response.