PP-126 Analysis of the virological features and impact on the efficacy treated with peginterferon alfa-2a and ribavirin in patients coinfected with HBV and HCV

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Objective: To study the virological features and impact on the efficacy treated with peginterferon alfa-2a and ribavirin in patients coinfected with HBV and HCV.
Methods: The virological data of 50 patientswere retrospectively analyzed and virological responses rates treated with peginterferon alfa-2a and ribavirin were investigated.
Results: HBV DNA level of patients coinfected with HBV and HCV (4.6±0.9) log $_{10}$ copies/mL was significantly lower than that in HBV monoinfection group (5.9±1.2) $\log_{10}$ copies/mL (t=5.964, $P<0.01$). HBeAg positive rate (12.0%, 6/50) of patients co-infected with HBV and HCV group was significantly lower than that (45.3%,19/42) in HBV monoinfection group ($\chi^2=12.743$, $P<0.01$). pEVR rate and ETVR rate (50.0%, 15/30; 90.0%, 27/30) of patients with genotype 1 in HBV and HCV coinfection group were significantly higher than those (16.0%, 4/25; 56.0%, 14/25) in monoinfection HCV group ($\chi^2=6.971$, $P=0.008$; $\chi^2=8.307$, $P=0.004$); Relapse rate (55.6%, 15/27) of patients with genotype 1 in HBV and HCV coinfection group was significantly higher than that (21.4%, 3/14) in HCV monoinfection group ($\chi^2=4.360$, $P=0.037$). The incidence of side effects (30%, 15/50) of patients in HBV and HCV coinfection group was significantly higher than that (13%, 6/46) in HCV monoinfection group ($\chi^2=4.031$, $P=0.045$). Reactivation rate of HBV DNA (33.3%, 9/27) with HCV SVR was significantly higher than that of patients without SVR (8.7%, 2/23) ($\chi^2=4.393$, $P=0.036$).
Conclusions: Compared with HCV monoinfected patients, pEVR, ETVR and relapse rates of patients with genotype 1 in HBV and HCV coinfection group were high, but they had similar SVR rates.

PP-127 Cloning, expression and identification in immunohistochemistry of humanized single-chain Fv antibody against hepatitis C virus core protein

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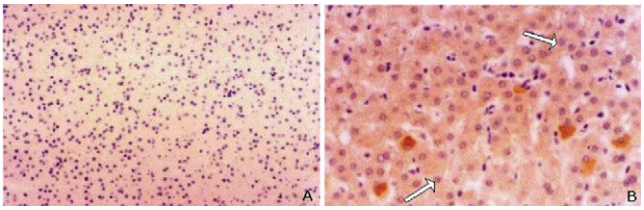
Objective: To clone and express humanized single chain Fv antibody (scFv) against hepatitis C virus core protein and identify its application in immunohistochemistry.
Methods: The phage antibody library was panned by HCV core protein, which was coated in microtiter plate. After five rounds of biopanning, 60 phage clones were identified specific to HCV core protein. The selected scFv was subcloned into the vector pCANTAB5E for expression as E-tagged soluble scFv. The liver tissue sections from normal person and patients with chronic hepatitis C were immunostained.
Results: ELISA and immunohistochemistry study demonstrated that the human single chain Fv antibody against hepatitis C virus core protein has a specific binding character with paraffin-embedded tissues from patients with chronic hepatitis C, but did not react with liver tissues from healthy persons.



Conclusion: Humanized single chain Fv antibody to HCV core protein has been identified by means of the phage display technology.

PP-128 Metabolic implications of hepatitis C virus infection & its correlation to steatohepatits in chronic hepatitis C patients with and without type 2 diabetes

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Background: Chronic hepatitis C virus (HCV) infection is not a simple viral infection; it has many metabolic and autoimmune complications.
Objective: To investigate the impacts of chronic HCV infection on glucose & lipid metabolism and its correlation with body mass index (BMI) and hepatosteatosis in chronic HCV patients.
Patients and methods: (103) chronic HCV patients were involved in this study, patients were classified into, Group I: 68 chronic HCV patients with type 2 diabetes. Group II: 35 chronic HCV patients without type 2 diabetes. In addition to 25 patients with type 2 diabetes as controls; group III: calculation of BMI, measurement of the waist/hip ratio and assessment of fasting plasma insulin level was done by immune-enzymatic method, assessment of insulin resistance state by Homeostatic Model Assessment (HOMA-IR), detection of anti-HCV by 3rd generation ELISA test & confirmed by qualitative polymerase chain reaction (PCR).
Results: Diabetic patients with chronic HCV infection have significantly higher fasting plasma insulin level, insulin resistance state, liver enzymes & steatosis/fibrosis scores than non diabetic patients,there was non significant difference regarding BMI between all groups. Positive correlations were found between plasma insulin level, liver enzymes & steatohepatitis in patients either they were diabetics or not.
Conclusion: Chronic HCV infection may be regarded as an independent risk factor for the development of type 2 diabetes. HCV induces a state of insulin resistance which is the key step in glucose intolerance, virus C induced steatohepatitis and hence accelerates progression to cirrhosis.

PP-129 HCV genotype distribution in chronic hepatitis C patients in a tertiary care hospital of Rawalpindi, Pakistan

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Background/Aims: Genotypes 1-6 have a worldwide distribution. Types 1a and 1b are predominant in Northern Europe and North America, and in Southern and Eastern Europe and Japan, respectively. Type 3 in south Asia. Genotype 4 in Egypt, genotype 5 in Central and South America and genotype 6 is common in China, Japan and South East Asia. In Pakistan 3a is the commonest genotype. As reported by different authors HCV genotype 3a is associated with the most favorable outcome regarding ETR and SVR after 24 weeks conventional Interferon and Ribavirin therapy. The aim of this study is to find out HCV Genotypes in newly diagnosed chronic hepatitis C patients.
Methods: This observational study was conducted in chronic hepatitis C patients treated with conventional interferon 3 MIU thrice weekly and ribavirin 400 mg bid for 24 weeks. All patients had raised ALT levels for last 06 months, had positive PCR for HCV RNA by real time method and liver biopsy was done during year 2006-2007. Genotyping was done on Roche Genotyping Kit. Data was analyzed by using SPSS 13.0
Results: Out of 164 patients, 85.9% (n=141) were genotype 3a.