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analysis of MxA, a well-characterised IFN type I-induced gene, was also performed as positive control.

Results: PBMC from patients with HCV express all examined miRNAs but their levels showed high variability (coefficient of variation >100%). In addition we observed that the overall expression of miRNAs was significantly different between patients with HCV and healthy subjects. When levels of the above miRNAs were measured 12 hours after the first injection of IFN, increases in expression levels of these miRNAs were observed in a percentage of patients ranging from 33.3% to 66.6% depending on the type of miRNA examined.

Conclusion: These findings suggest that miRNAs can be differentially induced by IFN treatment in HCV positive patients. Given the important role of miRNAs in defending the host against virus infection it is possible that such miRNAs may represent an important determinant of the clinical outcome of IFN therapy in HCV infection.

P2023 Acute hepatitis C and nosocomial transmission of hepatitis C virus: an emergent threat in the hospital setting?

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Objective: Symptomatic acute hepatitis C (AHC) is rarely identified in the clinical practice, it is frequently followed by the spontaneous resolution (SR) of hepatitis C virus (HCV) infection without evolution into chronicity, and it generally responds to standard antiviral therapy better than chronic hepatitis C does. We prospectively followed all consecutive AHC cases we observed in the inpatient/outpatient services of our hospital units during the last three-year period, in particular as regards: 1) risk factors; 2) clinical outcome; 3) efficacy of treatment, if any.

Methods: Between 1st January 2005 and 31st December 2007, we diagnosed symptomatic AHC in 13 males, median age 54 years; main demographic characteristics are shown in the table. At the 12-week follow-up, we began pegylated interferon (PegIFN) + ribavirin in patients who had detectable plasma HCV RNA as measured by PCR (Cobas Amplicor Monitor®, Roche, in copies/mL up to October 2005; TaqMan® RT-PCR, Roche, in IU/mL from November 2005), whereas the PCR-negative patients were followed up at least for 24 weeks, after which they were considered as having SR of their AHC if still PCR-negative.

Results: Seven patients had one or more nosocomial risk factors that were associated with several diagnostic and/or therapeutic procedures; three patients were iv drug abusers, one had recent dental surgery, one had a HCV-positive wife, the remaining one having no known risk factors. Seven patients had SR of AHC, three responded to PegIFN alpha 2b + ribavirin, and two relapsed to PegIFN alpha 2a + ribavirin, as shown in the table; the 13th patient had spontaneous biochemical normalisation with viral persistence.

Age	Risk factors	Genotype	Peak PCR	Peak ALT	Therapy	Outcome
23	IV drug abuse	1b	3.53 × 10 ⁴	1,841	PegIFN alpha-2b	SVR
54	Colonoscopy, Herniorrhaphy	1b	1.8 × 10 ⁶	1,615	No	SR
73	Coronary angiography/plasty, Blood transfusion	2a/2c	1.26 × 10 ⁵	969	PegIFN alpha-2b + Riba	SVR
58	Gastroscopy, Colonoscopy	2a/2c	7 × 10 ⁵	1,108	PegIFN alpha-2b + Riba	SVR
46	Dental surgery	1b	1.17 × 10 ⁵	749	No	SR
48	Blood transfusion, Haemodialysis	1a	1.49 × 10 ⁴	138	No	SR
61	Coronariography	2a/2c	4.18 × 10 ⁶	1,175	PegIFN alpha-2a + Riba	Relapse
69	IV injection	1b	1.99 × 10 ⁶	733	No	Viral persistence
67	ERCP, Cholecystectomy	1b	8.14 × 10 ⁴	1,356	PegIFN alpha-2a + Riba	Relapse
66	HCV+ wife	1b	1.54 × 10 ⁴	2,514	No	SR
30	IV drug abuse	1b	8.72 × 10 ³	3,118	No	SR
35	None	3a	1.45 × 10 ⁷	2,639	No	SR
30	IV drug abuse	1b	>6.9 × 10 ⁷	3,894	No	SR

ERCP, endoscopic retrograde cholangiopancreatography; ALT, alanine aminotransferase; SVR, sustained virological response.

Conclusions: Our study, albeit carried out on a small number of patients, confirms the results of recently published papers on some features

of AHC, in particular: 1) the increasing impact of nosocomial HCV acquisition resulting from unsafe hospital practices and contaminated equipment; 2) the frequent SR of symptomatic AHC. We stress the need of: 1) strict adherence to universal precautions in order to minimise the risk of nosocomial HCV transmission; 2) wait for the first 12 weeks after acute infection in order to observe the possible SR of AHC.

P2024 Transversal study in a group of Spanish HIV/HCV co-infected patients with non-treated chronic hepatitis C: epidemiological study, prevalence and grade of hepatic fibrosis

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Objectives: 1) To analyse hepatic fibrosis using non invasive methods in a group of HIV and non treated HCV infected patients and 2) To determine the factors that influence on fibrosis development: sex, alcohol and illegal drugs abuse, hepatitis C genotype, co infection with HBV and HDV, HIV and HCV viral load, CD4+ cells and HAART use. It was also analysed why patients were not receiving treatment for HCV infection.

Methods: This is an observational and transversal study. Patients are a subgroup of the multicentric study GRAPHICO and all had active HCV infection without treatment. Hepatic fibrosis was measured by Fibroscan and APRI/Forns index. Statistical analysis was done by SPSS 13.0.

Results: 102 patients were included and most of them were male (71%). 93 (91%) had been IVDA (only 4 active drug users), 22.5% had been heavy alcohol drinkers, 81% were smokers and 7% consumed cannabis. Genotype 1 was the most frequent (61%), 7 were co infected with HBV and 3 with HDV. Causes for no treatment were: patient rejection (52%), previous fracases (22%) and contraindicated therapy and/or toxicity (25.5%). Mean HCV viral load was 1.23 × 10⁷ copies/ml and only 28 (27.5%) had detectable HIV viral load. Most subjects were receiving HAART (89%) and mean CD4 cells was 479 mm³. The CD4+ nadir was 220 per mm³. Mean time of HCV infection was 12 years. Fibrosis was detected by APRI/Forns in 21 patients (20.6%) and Fibroscan was realised in 78 (76.5%) showing F0-F1 (≤7 kPa) in 33%, F2 (7.1–9.4 kPa) in 20%, F3 (9.5–12 kPa) in 11% and F4 (>12 kPa) in 35%. As compared with those without significant fibrosis, absolute, percentage and nadir of CD4+ cells, platelets count, cholesterol level and protrombine activity were lower in patients with significant fibrosis (p < 0.05). Similarly, genotype 1, male sex, alcohol intake, tobacco and cannabis consumption and HbsAg+ were more frequent in subjects with significant fibrosis (p < 0.05). There was a direct correlation of fibrosis grade by transient elastography and APRI/Forns index.

Conclusions: 1) Patients co infected with HCV and HIV who are not receiving treatment for HCV have more hepatic fibrosis if they are men, if are co infected with HBV, if have genotype 1 and if are smokers, heavy alcohol drinkers and cannabis consumer. 2) Fibrosis is more significant in those with lower absolute, percentage and nadir of CD4+ cells. 3) Fibroscan and APRI/Forns index are similarly for determining hepatic fibrosis using non invasive methods.

P2025 Genetic diversity of hepatitis C virus among Bulgarian injecting drug users with hepatitis C

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Objective: To assess the genotype diversity of hepatitis C virus (HCV) among Bulgarian injecting drug users with hepatitis C.

Methods: Serum samples from 147 anti-HCV positive injecting drug users were tested by qualitative RT-PCR assay AMPLICOR Hepatitis C virus (HCV) Test, version 2.0 (Roche Molecular Systems, Inc, Branchburg, NJ, USA). Commercially available enzyme immunoassay ETI-AB-HCVK-4 (Dia Sorin, S.p.A. Italy) was used to detect anti-HCV antibody. Genotyping of HCV RNA obtained from serum samples was performed using Versant HCV Genotype Assay (LiPa) – Bayer HealthCare LLC, Belgium.

Results: Since January till November 2008 a total of 147 anti-HCV positive serum samples from Bulgarian injecting drug users, were tested