

**Conclusions:** PCR and DNA sequencing detected the presence of *H. hepaticus* more often in liver biopsies with HCV infection without than with concomitant HCC.

**OL-049** Screening of proteins binding to HCV NS3 protein from human pancreas cDNA library by yeast two-hybrid

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**Objective:** To screen proteins of human pancreas cDNA library interacting with HCV NS3 protein.

**Methods:** The library was amplified, purified and evaluated, and then the purified library plasmids were transformed into yeast strain Y187. The reconstructed plasmid pGBKT7-NS3 was transformed into yeast strain AH109 and screened on the nutrient deficiency medium SD/-Trp. The transformed AH109 mated with Y187 containing the library plasmid. The diploid yeast cells were plated on nutrient deficiency medium SD/-Trp/-Leu/-His/-Ade and SD/-Trp/-Leu/-His/-Ade containing X- $\alpha$ -gal for selecting. The plasmids in diploid yeast cells were extracted and electrotransformed into *E. coli* DH5 $\alpha$ . The plasmids in DH5 $\alpha$  were extracted, sequenced and analyzed by bioinformatic methods.

**Results:** Eight proteins interacting with HCV NS3 were found.

**Conclusions:** These results show that HCV NS3 protein may be related with metabolism of glucose and lipid.

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**OL-050** Extended Programme of Immunization (E.P.I) in Pakistan; shadow shift from polio to hepatitis, the threatening upcoming challenge

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**Background and Aims:** In past, EPI-Pakistan focused primarily on diseases like Polio/Measles/Mumps/Tuberculosis, but as figures switched from 238 Polio, 0.3 Million Hepatitis-B and nearly 0.45 Million Hepatitis-C registered cases in 1997 to 30 Polio, 5.3 Million Hepatitis-B and 4.9 Million Hepatitis-C cases in 2007, government changed the policy, making a stress over Hepatitis-B control.

HBV/HCV is well known to cause hepatitis/related complications throughout the world, proving a threatening challenge to developing countries. Study aim was to estimate seropositivity levels of HBV/HCV among apparently healthy young population.

**Methods:** Study was conducted at Holy-Family Hospital Rawalpindi, Pakistan. Over a period of 6months, 500cases aged between 20–40Years including 50Doctors and 450 routine blood-donors were screened after written-informed consent. They had neither any sign nor symptom of acute/chronic liver-disease. Samples were screened for HBsAg and Anti-HCV-antibodies. Cases found positive for HCV-Ab were interviewed for possible risk factors.

**Results:** Overall 52% were male, 6.4% positive for HBsAg, male-female ratio 38:27, mean-age 24 $\pm$ 4 years, 4.7% positive for Anti-HCV-antibodies, mean-age 25 $\pm$ 3 years and 0.33% positive for both. Overall infection-rate was 3.3%. Prevalence-rate of Anti-HCV-antibodies (4.7%) was less than HBsAg positivity (6.4%). There was no significant overlap (0.5%) between seropositivity of Anti-HCV with HBsAg, reflecting different epidemiological-factors. Cases with Anti-HCV antibodies were further evaluated; 56% were with

raised ALT, 79% had risk factors including blood-group testing (71%), parenteral-medications/needle/prick-injuries (71%), dental-procedures (19%), previous-surgery/tattoo-markings (15%), unsafe-sex (19%) and multiple blood-transfusions (2%). 7% gave no history of possible exposure. 16 doctors positive for virus (14Hep-B and 2Hep-C), all gave history of needle-prick injuries.

**Conclusion:** Hepatitis B-Vaccine inclusion in EPI-Pakistan will decline its prevalence but HCV mostly spread via health-care facilities, so behavior-modification is superior to clinical therapy as minimizing all types of needle-pricks is advised till proper aseptic practice.

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**OL-051** Detect the gene expression influence after the interaction between HCV NS4A and CAML with microarray assay

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**Aim:** To understand gene expression influence after the interaction between HCV NS4A and CAML.

**Methods:** The expressive vector of pCMV/Myc-NS4A and pcDNA3.1/HisA-CAML were constructed by routine molecular biological methods. The 293 cells were transfected by pCMV/Myc-NS4A and pcDNA3.1/HisA-CAML, respectively using lipofectamine. The total RNA was isolated and reverse transcribed. The cDNAs were subjected for microarray screening.

**Results:** The expressive vector has been constructed and confirmed by restriction enzyme digestion and DNA sequencing analysis. The expression of CAML protein has been confirmed by Western blot with single chain variable region (scFv) antibody. High quality mRNA and cDNA had been prepared and successful microarray screening had been conducted. From the scanning results, it was found 7 genes related to cell apoptosis, among them, 4 were up-regulated and 3 were down-regulated.

**Conclusion:** The expression of NS4A protein affected the expression spectrum of 293-CAMLcells, especially some genes related to cell apoptosis pass way. HCV NS4A maybe will have some negative effect on the progress of cell apoptosis, and then lead to the chronic HCV infection.

**OL-052** Successful preventive programs in reducing HCV prevalence and increase blood safety in Abadan blood donors during 2005–2008

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Estimated 3% of the world population is infected with hepatitis C virus and 20% of patients progress to liver cirrhosis with an increased risk for the development of hepatocellular carcinoma. In the United States alone, nearly four million persons are infected and 30,000 acute new infections are estimated to occur annually. Because the role of transfusion in HCV transmission and the high number of blood transfusion dependent patients in Abadan, study of HCV prevalence in 3 years helps us to evaluating the efficacy of preventive program in increase the blood safety.

In this descriptive cross sectional survey we studied all blood donors that referred to Abadan blood center during