were excluded. 80 (14%) subjects had past infection with HBV (HBsAg negative, HBcAb positive). Individuals with past HBV were significantly older than HBsAg positive and HBsAg, HBcAb negative subjects ($p<0.001$). The prevalence of HBsAg positivity was highest in subjects born in Vietnam (17.4%, 4/23), followed by China (11.5%, 24/157), Hong Kong (8.3%, 18/288), the UK (6.7%, 5/75) and other (6.2%, 2/32). Only 12% of subjects reported previous vaccination against HBV. To date, 25 of the HBsAg positive individuals have been seen in our clinic. 1 was HBeAg positive (immunotolerant) and 24 were HBeAg negative. Of these, 3 have active disease (including 1 cirrhotic) and have been started on treatment. 14 have inactive cHBV and 7 are undergoing observation to determine disease activity. No cases of co-infection with HCV, HIV or Delta were found.

Conclusion 1. Undiagnosed cHBV is common in the British-Chinese community of NE England, including subjects born in the UK. 2. A proportion had active cHBV requiring treatment. 3. If these results were applied to the entire UK British-Chinese population targeted screening should lead to approximately 32 250 newly diagnosed cases of cHBV. 4. These results provide evidence for a UK HBV screening and vaccination program for the British-Chinese community.

Funding This study was supported by a Gilead UK and Ireland Fellowship and LIVErNORTH.

REFERENCES

1. **Lok A,** McMahon B. *Hepatology* 2009;**50**:1—36.
2. **Piorkowsky N.** *J Hepatol* 2009;**51**:1068—73.

P55 HCV QUASISPECIES ANALYSIS OF PATIENTS WITH GENOTYPE 3 HCV WHO RELAPSE SUGGEST TWO DIFFERENT MECHANISMS OF RELAPSE

doi:10.1136/gutjnl-2011-300857a.55

[1]J Waters, [2]D Shoeb, [3]G R Foster. *[1]Biizard Institute, Queen Mary University of London; [2]Biizard Institute; [3]Queen Mary University of London*

Introduction Patients persistently infected with genotype 3 HCV are more likely to have a sustained viral response (SVR) to interferon and ribavirin therapy than patients infected with genotype 1. However many patients with advanced fibrosis infected with genotype 3 HCV relapse following therapy. The mechanisms underlying relapse are not known.

Aim To examine the speed of relapse and compare quasispecies prior to and immediately following relapse.

Method 30 chronically infected patients with advanced fibrosis (fibrosis score >F3/6) were treated for 24—48 weeks with Peg IFN α 2a and ribavirin. Plasma samples were taken pre-treatment, during treatment and weekly post treatment. The HCV quasispecies in the pre-treatment sample and the first HCV-RNA positive post-treatment samples of the relapsed patients were assessed.

Results All of the patients responded with loss of virus on treatment. 18 had a sustained viral response and 12 patients relapsed post-treatment. All of the patients that relapsed did so within 4—6 weeks of treatment cessation.

HCV-RNA was extracted from the pre- and post samples of relapsed patients. 10—15 clones from both samples were successfully prepared and sequenced over the E2 region, including the HVR1, 2 and 3 regions and the PKR-eIF2α region in five patients. Construction of phylogenetic trees showed that in two patients the quasispecies that emerged post-treatment were similar to those seen pre-treatment but in three patients a dramatic shift in populations occurred.

Conclusion Relapse post therapy is very rapid and two distinct patterns of relapse were seen. These data suggest that there may be different mechanisms of relapse following treatment withdrawal in patients with genotype 3 HCV.

P56 WHAT IS THE BEST METHOD OF CASE FINDING FOR CHRONIC VIRAL HEPATITIS IN MIGRANT COMMUNITIES?

doi:10.1136/gutjnl-2011-300857a.56

[1]H Lewis, [2]K Burke, [3]S Begum, [2]I Ushiro-Limb, [1]G Foster. *[1]Queen Mary University of London; [2]Barts and the London NHS Trust; [3]Hepatitis C Trust*

Introduction The prevalence of chronic viral hepatitis in people born in Pakistan living in the UK is 5% (2.7% Hepatitis C Virus (HCV) and 1.8% Hepatitis B Virus (HBV). Studies from the HPA show an increased risk of end stage liver disease from HCV in people from Pakistan living in the UK. Screening migrants from high prevalence regions (>2%) for HBV is cost effective if screening of 35% of a population is achieved. Given that screening for viral hepatitis in migrants will reduce morbidity, mortality and onward transmission of chronic viral hepatitis, the outstanding question is how should this be done?

Aim The aim of this observational study was to evaluate community, and general practice (GP) based approaches to screening migrants for viral hepatitis.

Method We distributed 5000 testing cards in Mosques, following an awareness campaign, encouraging people from Pakistan to attend their GP surgery for viral hepatitis testing. In primary care practices we studied two approaches targeting registered Pakistani/British Pakistani patients: an opportunistic approach, whereby patients attending the practice were offered screening for HBV and HCV, and an 'opt out' approach, where patients were contacted by letter and invited to opt out of screening. Those who did not 'opt out' were telephoned and asked to attend screening clinics.

Results 5000 leaflets were distributed to Mosques but no patients presented to their GP for testing. In the primary care study there were 1163 Pakistani/British Pakistani patients in the 'opportunistic' arm. Of these 17 (1.5%) were screened and all were uninfected. In the 'opt out' arm there were 1134 eligible patients. It was not possible to screen 524 patients (46%) due to inadequate contact details (38%), previous screening (4%) or incorrectly recorded ethnicity (4%). Of those who could be contacted and were eligible for screening, 37% (223/600) have been screened. 75% of those who made a screening appointment were born in Pakistan, and 25% were British Pakistani patients. 1% of those screened were found to be HBsAg positive and 2.4% were HCV antibody positive.

Conclusion Community awareness campaigns and leaflets do not directly lead to testing for viral hepatitis in at risk immigrant groups. A direct screening approach is more effective than an opportunistic screening approach in primary care. Inaccurate GP records reduce the efficiency of screening but GP based testing is easy to implement, popular with patients and effective. First generation migrants are more likely to comply with screening which may improve the cost-effectiveness of this approach.

REFERENCES

1. **Uddin G,** Shoeb D, Solaiman S. Prevalence of chronic viral hepatitis in people of south Asian ethnicity living in England: the prevalence cannot necessarily be predicted from the prevalence in the country of origin. *J Viral Hepat* 2009. doi:10.1111/j.1365-2893.2009.01240.x.
2. **Veldhuijzen IK,** Toy M, Hahne SJM, *et al*. Screening and early treatment of migrants for chronic hepatitis B virus is cost effective. *Gastroenterology* 2010;**138**:522—30.

P57 THE IL28B GENE SNP RS12979860 CC HAPLOTYPE, PREDICTOR OF RESPONSE TO TREATMENT IN CHRONIC HCV INFECTION, IS ASSOCIATED TO HIGH NUMBERS OF CD56BRIGHT NK CELLS, LOW NUMBERS OF CD3-CD56-CD16 + NK CELLS AND LOW HCV-SPECIFIC IL-10 PRODUCTION

doi:10.1136/gutjnl-2011-300857a.57

I Carey, M Bruce, A Mendes, A Scalori, D Joshi, K Agarwal, G Mieli-Vergani, D Vergani. *Institute of Liver Studies, King's College Hospital NHS Foundation Trust*

Introduction Single nucleotide polymorphisms (SNPs) rs12979860 and rs8099917 near the IL28B gene predict response to treatment in