Competing interests None declared.

Viral hepatitis

PMO-143 THE USE OF DRY BLOOD SPOT TESTING (DBS) FOR VIRAL HEPATITIS IN MOSQUES-A PILOT STUDY OF 3 SURREY CENTRES

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Introduction Chronic Viral Hepatitis (CVH) affects ~0.5% of native UK population. However, endemicity varies world wide & previous studies show that ethnic minorities are likely to preserve the higher rates of their region of origin. The estimated prevalence of chronic HBV & HCV in Pakistan is >5% & the current UK Pakistani population is >1.2 million. The study aimed to (1) characterise HBV & HCV prevalence in a local Pakistani community within Surrey using DBS testing (2) test the hypothesis that 2nd generation immigrants (ie, those born in UK) retain this higher prevalence (3) promote awareness of viral hepatitis within this population.

Methods We approached community leaders of three Woking (Surrey, UK) mosques & prospectively arranged testing sessions over 10 months (2011–2012), which were advertised during religious gatherings. Following approval by the Local Ethical Board & formal consent, finger prick DBS were tested for HBsAg, HBcore antibody, antiHCV Ab, HCV (Genotype & RNA quantification). Volunteers filled out a questionnaire outlining risk factors for CVH. Subjects who were HBsAg and/or AntiHCV Ab were invited back to the Mosques for focused counselling & offered outpatient confirmatory testing including specialist Hepatology assessment & treatment as necessary.

Results A total of 219 subjects were tested (164M, 55F), age 18–81 yrs, mean age 45 yrs, median 44 yrs & modal age range 30–39 yrs. The mean total duration of stay in the UK prior to testing was 24 yrs; 195 cases (89%) were of Pakistani origin of which there were 176 1st & 19 2nd gen immigrants. Of those tested, 4(2F & 2M) were HBSAg+ve and four (all M) were antiHCV+ve with 3HCV RNA+ve (2Genotype 3a and 1, 3k). Definite risk factors for CVH transmission were not identified. Mean duration of stay in the UK for +ve cases was 13 yrs, all were 1st generation Pakistani (fibroscan score <8 kPa, normal LFTS, two with prior family history and three were first degree relatives).

Conclusion DBS testing confirms that our local Pakistani community has retained CVH prevalence rates atleast seven times greater than that of the native UK population. Primary & secondary physicians need better awareness to engage & identify individuals in susceptible ethnic populations. This study has not picked up any cases of viral hepatitis in 2nd generation immigrants & further work is required to conclusively analyse this subset of the community. Our results suggest inequalities in health related to viral hepatitis in the Pakistani population & provide evidence for a wider UK study in this vulnerable group. Places of worship may act as focal testing points to improve screening uptake, management & potential treatment of viral hepatitis in at risk populations.

Competing interests None declared.

PMO-144 EXPERIENCE OF MANAGING PATIENTS WITH HEPATITIS C IN OUTREACH

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Introduction Subjects who acquire Hepatitis C (HCV) from injecting drug use (IDU) and attend drug rehabilitation programs are a "hard to reach" group and often don't access treatment for HCV. In our experience, their non-attendance at secondary care clinics is ~60%. In order to improve access to treatment for this group we established three outreach clinics at drug treatment centres in North of Tyne Region. Our aim was to review the outcomes for patients attending these outreach clinics.

Methods Retrospective review of patients referred to three outreach clinics: 1. Plummer Court (PC), an addiction psychiatry led drug and alcohol centre in Newcastle 2. Bridge View (BV), a GP led drug treatment centre in Newcastle 3. A GP surgery in Blyth, Northumberland associated with the Harm Reduction service. Data were collected on demographics, attendance rates and treatment outcomes.

Results A total of 133 patients were referred to the three clinics and 96 (72%) attended ≥1 appointment. Their demographic and clinical data are shown in Abstract PMO-144 table 1. Of the 96 seen, 75 (78%) had treatment workup, but 21 (22%) were deemed "not ready" for treatment due to on-going IDU, alcohol excess, psychiatric disease or unfavourable social circumstances. Of the 75 subjects who had treatment workup, 25 (33%) have since either failed to attend appointments, elected to delay treatment or had contra-indications (including two decompensated cirrhotics and two with hepatocellular carcinoma). 30 (40%) commenced treatment and 20 (27%) patients are waiting to start treatment. Of the 30 who started treatment, 11 (37%) completed treatment (five had sustained virological response, one relapsed and five awaiting post-treatment results), 13 (43%) are currently in treatment and 6 (20%) did not complete therapy (poor compliance or side effects).

Abstract PMO-144 Table 1

	PC	BV	GP
Clinic established	January 2008	October 2010	January 2011
Patients referred (n)	65	41	27
Patients attend ≥1 clinic	44	31	21
Non-attendance (%)	32%	24%	22%
Age (median + range)	36 (19–62)	36 (27–64)	37 (27–48)
HCV G1/4	57%	29%	45%
Methadone/subutex use	84%	100%	62%
Cirrhotics n (%)	7 (16%)	4 (11%)	1 (5%)
"Not ready" for treatment (%)	34%	10%	14%

Conclusion Outreach clinics in drug treatment centres substantially improved attendance rates of for patients with HCV and a history of substance misuse. More than 50% of subjects seen in outreach clinics commenced or are waiting to start HCV treatment. If adopted nationwide, this model of care may improve access to HCV treatment in "hard to reach" groups.

Competing interests None declared.

PMO-145 ETHNICITY HAS NO IMPACT ON SVR RATES IN PATIENTS WITH HCV GENOTYPE 3 TREATED WITH PEGYLATED INTERFERON AND RIBAVIRIN

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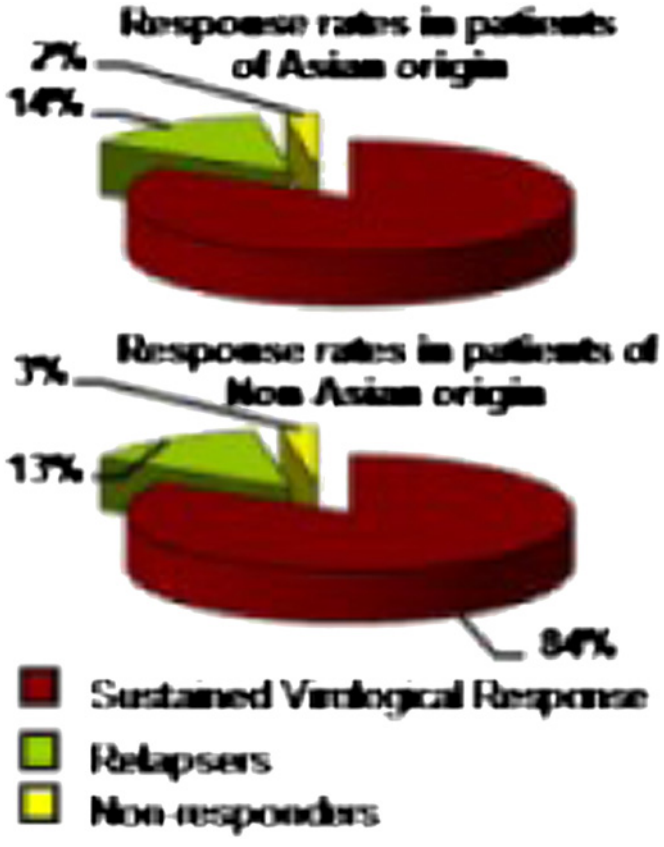
Introduction Chronic Hepatitis C affects over 170 million people world wide. Of the 4 main genotypes, genotype 3 is common in

South East Asia, particularly Pakistan, and in Europe represents up to 45% of newly diagnosed infections.[1] Although it is well established that ethnicity impacts on response rates (sustained virological response (SVR) rates) for Hepatitis C virus (HCV) Genotype 1 infections, there is controversy over whether ethnicity impacts on SVR rates in HCV genotype 3 infections.[2 3] In this study we performed a retrospective analysis of patients with genotype 3 HCV infections who had undergone treatment in a busy District General Hospital over the last 4 years to assess whether ethnicity impacted on SVR rates.

Methods All patients treated with standard therapy (pegylated interferon and ribavirin) over the last 4 years were studied and factors which are known to influence response rates together with ethnicity were examined in patients with genotype 3 chronic hepatitis C infection.

Results In total 630 patients were undergoing/had undergone standard treatment for chronic hepatitis C infection in our hospital over the last 4 years. Of these 147 were identified as being HCV genotype 3 infections. 80 of these patients had completed a course of treatment and had at least 6 months of follow-up (for assessment of SVR rates). These patients were divided into those from South East Asia (43 patients) and European patients (37 patients). Of the patients of Asian ethnicity 36 achieved an SVR (83.7%), six relapsed (13.9%) and one was a non-responder (2.4%). Of the patients of European ethnicity 31 achieved an SVR (83.8%), five relapsed (13.5%) and one was a non responder (2.7%). There was no significant statistical difference in SVR rates in patients from South East Asia (83.7% SVR) compared with patients of European origin (83.8%) ($p<0.01$).

Conclusion In this retrospective cohort study SVR rates in patients with genotype 3 chronic hepatitis C infection were not affected by ethnicity. Those patients who did not achieve SVR and failed standard therapy were predominantly relapsers as opposed to non-responders.



Abstract PMO-145 Figure 1 Treatment response rates in patients with genotype 3 chronic hepatitis C infection of Asian and Non Asian Origin.

Competing interests None declared.

REFERENCES

1. **Esteban J**, *et al.* The changing epidemiology of hepatitis C virus infection in Europe. *J Hepatol* 2008;**48**:148–62.
2. **Foster G**, *et al.* Response to antiviral therapy in patients with genotype 3 chronic hepatitis C: fibrosis but not race encourages relapse. *Eur J Gastroenterol Hepatol* 2011;**23**:747–53.
3. **Mutimer D**, *et al.* Inferior response of Asian versus non-Asian hepatitis C genotype 3 infection to combination antiviral therapy. *J Viral Hepat* 2008;**15**:115–19.

PMO-146 THE SOLUBLE ANTAGONISTIC FORM OF IFN-INDUCIBLE-PROTEIN-10 (IP-10) IS A PREDICTOR OF CLINICAL OUTCOME DURING ACUTE HEPATITIS C INFECTION

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Introduction Several immunological parameters have been associated with clinical outcome of HCV infection. We have previously found that acute HCV-infected subjects progressing to chronicity had higher serum IP-10 levels than those who spontaneously resolved the infection, which is counterintuitive given the known pro-inflammatory role of this chemokine. IP-10 is subjected to physiological cleavage of two aminoacids by DPPIV (CD26), which produces an NH_2-truncated form of the protein. The cleaved form (referred to as short IP-10) antagonises the biologically active longer form by competitively binding to the common receptor without inducing signalling. Most IP-10 assays quantify the total IP-10 protein; however, recently developed assays also allow the distinction of the two forms. The aim of this study was to investigate the role of antagonistic short IP-10 in influencing the clinical outcome of acute HCV infection.

Methods We analysed 16 patients with acute HCV infection who met the following criteria: ALT>10× upper limit normal (ULN), exposure to HCV within previous 4 months and HCV-RNA(+). Plasma was collected from these patients longitudinally at 12 timepoints. We quantified the long and short forms of IP-10 in these samples. Results were then analysed and correlated with the clinical outcome (chronic vs resolver). The longitudinal nature of the dataset was taken into account through the use of a "mixed model" analytical strategy for repeated measures.

Results Our investigation confirmed that subjects who progressed to chronicity (n=11) had higher serum concentrations of total IP-10 ($p<0.001$) compared to patients who resolved spontaneously (n=5). However, these higher amounts of detectable IP-10 were ascribable to increased levels of the antagonistic form ($p=0.036$), while serum concentrations of biologically active long IP-10 form were comparable with subjects who spontaneously resolved the infection ($p=0.460$).

Conclusion This study reports a novel mechanism of chemokine antagonism during acute HCV infection and may represent an additional factor in the failure of the host immune response in eradicating HCV infection. The results also reveal that the short IP-10 is a predictor of clinical outcome after acute HCV infection and may be used to aid treatment decisions during acute HCV infection.

Competing interests None declared.