Results In total, 295 patients with HCC and CHB were identified. Median age at the diagnosis of tumour was 37 years and 85% of patients were male. Ethnicity was classified as Black in 27% of patients and South East Asian in 21% of these patients. Cirrhosis was present in 81% whereas 8% were non-cirrhotic at diagnosis of HCC; data were unavailable in the remaining 11% of patients. 18% were HBs-antigen positive and 7% hepatitis C antibody positive. The distribution of HBV genotypes varied according to ethnic group, with genotypes A and E restricted to Black patients and genotypes B and C to South East Asian patients. On comparing these two groups, there were no differences in gender, the presence of cirrhosis, co-factors for liver disease, laboratory parameters or tumour stage, as assessed by the BCLC staging system. However, Black patients were significantly younger (median age: 44 vs 61 years, p<0.001). Although not significant, there was a trend towards a greater frequency of HBs-antigen positivity in the Black patients. No difference in viral load was observed. There was an increased probability of death within the follow-up period in the Black group (66% vs 39%, p=0.004). Comparison of Kaplan–Meier survival curves for the two groups demonstrated decreased survival following diagnosis of HCC in the Black group (log rank: p=0.31).

Conclusion In our cohort, we have observed that Black patients present at a younger age and have poorer length of survival in comparison to South East Asian patients. This may represent a more aggressive HCC phenotype that is associated with HBV genotypes A and E although there are potentially multiple confounding factors. Further research is required to determine the cause of this apparent inequality.

Competing interests None declared.

PMO-160 LIVER TRANSPLANTATION FOR CHRONIC HEPATITIS C IN NORTHERN IRELAND

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Introduction Chronic hepatitis C (CHC) is a leading cause of chronic liver disease in the UK. Orthotopic liver transplantation (OLT) is commonly used for end stage cirrhosis or hepatocellular cancer secondary to CHC. Unfortunately recurrence of CHC in the graft of transplant recipients is almost universal, often leading to accelerated liver damage. Our aim was to assess the outcome of patients attending a Regional Liver Unit in Northern Ireland who underwent OLT for liver disease due to CHC.

Methods A retrospective study was carried out of patients from Northern Ireland who had OLT between 1998 and 2010 for CHC associated chronic liver disease. Cases were identified by review of the regional OLT database and cross-referenced with the centre where OLT was carried out (KCH, London).

Results Sixteen patients (11 male) underwent 20 OLTs for CHC between April 1998 and December 2010 (<10% of all OLTs). Mean age was 54 years. 13 patients had single OLT and 3 required multiple transplants. The HCV genotypes were 1 (7), 3 (5) and 2 (4). Prior to OLT, 10 patients received antiviral therapy—all failed (five non-responders, two relapsed following treatment and three failed to tolerate treatment). Data were only available on 19 OLT episodes. Immunosuppressant maintenance therapy was as follows: tacrolimus (9), tacrolimus + mycophenolate (4), cyclosporine (1) and mycophenolate + prednisolone (1). Short-term complications included acute cellular rejection in 5 (26.3%) requiring pulsed methylprednisolone (4) or IL2 blockade (1). Two patients developed
renal failure requiring short-term dialysis post transplantation. Long-term complications included biliary anastomotic stricture in 6 (31%) patients and vascular complications in 3 (2 hepatic artery thrombus, 1 hepatic vein stenting). One patient acquired hepatitis B from the transplanted liver. Reasons for re-transplantation were hepatic artery thrombosis (2), recurrent cirrhosis with portal hypertension (1) and primary non-function of the graft (1). Seven (35%) transplants had cirrhosis confirmed on biopsy (5) or clinically (ascites (1) or oesophageal varices (1)) at a mean time of 25.6 months post transplant (range 12–48 months). Five-year mortality in the cohort was 25%.

Conclusion Hepatitis C accounted for <10% of OLT episodes in Northern Ireland during the study period. This demand may increase in the future as the chronic complications of previously undiagnosed hepatitis C are seen. One third of this small cohort developed cirrhosis within a few years of OLT.

Competing interests None declared.

PMO-161 HEPATITIS E (HEV) IN SOUTH WEST ENGLAND: GEOGRAPHICAL, ENVIRONMENTAL AND SOCIAL FACTORS: A CASE CONTROL STUDY

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Introduction HEV is an emerging infection in developed countries, and is considered a porcine zoonosis. HEV has been found in pigs worldwide and a number of water courses. In most cases the route of infection remains uncertain. A previous UK study showed that HEV was associated geographically to pig farms and coastal areas.1

Aim To study the geographical, environmental and social factors in HEV infection.

Methods Cases of HEV and controls were identified from 2147 consecutive patients attending the Jaundice Hotline clinic, Cornwall (1999–2011). For each case and control the following were recorded: home postcode, distance from home to nearest pig farm, distance from home to coast, rainfall levels during the 8 weeks prior to presentation and socioeconomic status. A further 611 Cornish residents were tested for anti-HEV IgG to determine geographic differences in HEV seroprevalence.

Results 40 cases of HEV were identified. Seven were excluded from study as they contracted HEV outside Cornwall. 132 age/sex matched controls were identified. 20/33 HEV cases clustered in the west of Cornwall, indicating that the geographical distribution was not uniform (OR=2.7, 95% CI 1.1 to 6.5, p=0.023). The seroprevalence of anti-HEV IgG in 611 Cornish residents increased gradually with age, and after adjusting for age/sex, there was no difference in seroprevalence between west Cornwall and the remaining study area. There was no difference between cases and controls in distance from the nearest pig farm, socioeconomic status or rainfall during the 8 weeks preceding disease presentation. Cases were more likely to live within 2000 m from the coast (OR=2.78, 95% CI 1.20 to 6.67, p=0.02), and this association remained significant after adjusting for age, sex, urban/rural domicile, proximity to pig farms and socioeconomic status.

Conclusion Cases of HEV are not uniformly distributed in Cornwall and cluster in the west of the county. This is not due to increased exposure to HEV at population level as there was no difference in HEV seroprevalence in the west of Cornwall and the rest of the study area. Proximity to a pig farm does not appear to be a risk factor for contracting HEV. Living within 2000 m of the coast does appear to be a risk factor, but the reason for this is uncertain.

Competing interests None declared.

REFERENCE