



Abstract PWE-148 Figure 1

A status throughout follow up and there was no incidence of Hepatocellular Carcinoma.

**Conclusion** BCS patients due to short stenosis of the hepatic vein or the upper IVC can be successfully managed with percutaneous recanalisation alone with good outcomes over a long period of follow up. Our data supports the stepwise approach to the managements of BCS, with better results than recent series.

#### REFERENCE

- 1 PMID 23389867. Good long-term outcome of Budd-Chiari syndrome with a stepwise management. *Hepatology* 2013 May;57(5):1962–8. doi: 10.1002/hep.26306.

**Disclosure of Interest** None Declared.

#### PWE-149 MINIMAL HEPATIC ENCEPHALOPATHY IS A SIGNIFICANT COMPLICATION IN CIRRHOTIC PATIENTS ADMITTED TO HOSPITAL

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**Introduction** Minimal hepatic encephalopathy (MHE) is a subtle cognitive impairment in patients with cirrhosis or porto-systemic shunts in the absence of abnormalities in standard neurological examination. The diagnosis of MHE has always taken a back seat in the evaluation of patients with cirrhosis primarily due to the fact that it is time consuming and not well validated. However, the prognostic importance of MHE cannot be understated as it has been found to affect motor skills like driving and timely treatment does improve quality of life and progression to overt encephalopathy (OHE).

**Objective** To estimate the prevalence of minimal hepatic encephalopathy in a sequential population of cirrhotic patients admitted in the gastroenterology ward at Aberdeen Royal Infirmary.

**Methods** 26 patients with a diagnosis of cirrhosis admitted over a 3 week period were included in the study. All patients with overt encephalopathy and sepsis were excluded from the study. The psychometric hepatic encephalopathy score (PHES) was used to assess the patients at the bedside. This comprises of a standardised battery of five paper-pencil psychometric tests: number connexion test A, number connexion test B, the digit symbol test, the line tracing test (time and errors) and the serial

dotting test. Minimal hepatic encephalopathy can be diagnosed when the psychometric hepatic encephalopathy score is less than -5. This score can be easily obtained by inputting data in an online tool (<http://www.redeh.org/phesapp/datosE.html>).

**Results** The mean age of the selected cirrhotic patients was  $59 \pm 2.8$  years and 74.1% were male. The commonest aetiology of cirrhosis was alcohol related liver disease (62.9%). 33.3% of patients were Child's A, 44.4% were Child's B and 22.3% were Child's C. The mean MELD score was  $16.5 \pm 9.2$ . The median PHES score was 1 (Range -10 to 2). Of the 26 patients evaluated, 7 patients were diagnosed to have MHE (25.9%). The prevalence varied with the Child's stage, 11.1% in Child's A, 25% in Child's B and 60% of Child's C patients. All patients diagnosed with MHE were commenced on Lactulose.

**Conclusion** Hospitalised patients with cirrhosis have a significant prevalence of MHE which is proportional to the stage of the liver disease. Prompt identification and treatment of this cohort will help in preventing them from progressing to overt encephalopathy.

**Disclosure of Interest** None Declared.

#### PWE-150 TRANSIENT ELASTOGRAPHY (FIBROSCANS) SUCCESS RATES ARE OPERATOR DEPENDENT; EXPERIENCE FROM THE SOUTH WEST LIVER UNIT

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**Introduction** Transient Elastography (FibroScan®) is a well validated, easy to use, non-invasive method of assessing the stage of liver fibrosis, whilst avoiding potential complications of liver biopsy. Despite ease of use, operator success rates vary, there is a known failure rate and its accuracy at assessing the stage of fibrosis depends on a 'valid' reading being gained. The South West Liver Unit has been performing transient elastography since 2010 and receives referrals from regional hospitals where scanning is unavailable. The aim of this study was to review the overall numbers performed, the success rates of operators, and the percentage of valid scans obtained.

**Methods** Data was collected and analysed retrospectively; and was obtained from the FibroScan® hard drive. Clinical information was obtained from clinical databases and clinical letters. Validation of scan was based on the three recognised validation criteria; (1) >10 valid readings, (2) success rate > 60% and (3) interquartile range to median ratio of < 0.3.

**Results** Between 2010 and 2012 inclusive, 1819 scans were undertaken. Multiple attempts ( $n = 247$ ), including probe size change, were excluded. Of the remaining 1572 scans, (2010 = 537, 2011=544, 2012= 558), 74% were valid on above criteria (2010=72%, 2011=75%, 2012=74%). Overall doctors performed more scans than nurses,  $n = 856$  versus  $n = 713$ , but nurses had a slightly higher mean success rate, 75.5% vs. 72.5%. Scans were performed by 14 different operators (registrars, consultants and nurses). Individual operator success rates varied widely from 43% to 87%; as did the number of scans performed, median = 70, range 15–373. Success rates were highest in those with formal training, with a weak correlation to number of scans performed ( $r^2 = 0.34$ ,  $p = \text{ns}$ ). The commonest scan indications included regional hospital referral (31%), non-alcohol related fatty liver disease (25%), viral hepatitis (13.5%) and alcohol related liver disease (11%).

**Conclusion** Each year an increasing number of scans are performed, with good overall success rates; although a proportion of scans completed will meet 'invalid' criteria and this must be taken into account when interrupting the predicted fibrosis score. Inter-operator variability is evident and relates to prior formal training (undertaken by EchoSens) and total number of scans performed. Nurses undertake scans in dedicated clinics with a set time allowance and this may explain their higher success rates. Transient elastography should, therefore, be performed by those with formal training, undertaking regular scans in a dedicated clinic, to increase validity of results.

**Disclosure of Interest** None Declared.

#### **PWE-151 COMPARISON OF TYPE 1 AUTOIMMUNE HEPATITIS PATIENTS' CHARACTERISTIC IN CAUCASIAN, ASIAN AND BLACK ETHNIC GROUPS: A SINGLE CENTRE EXPERIENCE**

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**Introduction** Autoimmune hepatitis (AIH) is a disease of unknown aetiology characterised by interface hepatitis, hypergammaglobulinaemia and circulating autoantibodies.<sup>1,2</sup> It is associated with Human leucocyte antigen (HLA) DR3/DR4 allotypes which are common in European Caucasian population.<sup>2</sup> Previous published studies reported late clinical presentations and poor outcome in non-Caucasian ethnic groups.

**Methods** This is a retrospective analysis of patients with type 1 AIH at a single centre tertiary liver transplant unit between year 1995 and 2012. Patients with simplified AIH score of more than or equal to 6 were included in the study. Data were collected thoroughly from electronic case notes, clinical letters and treatment charts. Basic demographics, clinical presentations, blood parameters such as biochemistry and immunology, liver histology and presence of other associated autoimmune conditions were documented. Those factors were compared among three ethnic groups: Caucasian, Asian and Black-African.

**Results** A total of 190 patients are included in the study. The majority (78%) of AIH patients are females. Majority (84%) were Caucasian and Asian ethnicity constitutes 12% of the study population with the remainder (4%) being Black ethnicity. Age of diagnosis is slightly higher among Caucasian groups although non-significantly (Median age 50.5 vs 34.9 in Asian and 45.3 in Black).

No significant differences were detected for associated autoimmune conditions, DR3/DR4 association or liver biochemistry blood results among three ethnic groups. Immunoglobulin G and Immunoglobulin A are significantly lower in Caucasian compared to non-Caucasian populations ( $p = 0.029, 0.005$  respectively). There are no differences in clinical outcomes such as cirrhosis, development of hepatocellular carcinoma (HCC) or liver decompensation among three different ethnic groups.

**Conclusion** Clinical presentations and blood parameters were similar among three groups except Ig G and Ig A which were lower in Caucasian ethnic populations. Overall transplant free survival was similar among the three groups

#### **REFERENCES**

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- 2 Albert J, Czaja PTD. Genetic susceptibilities for immune expression and liver cell injury in autoimmune hepatitis. *Immunological Reviews* 2000;174:250–259

#### **Disclosure of Interest**

None Declared.

#### **PWE-152 PRIMARY SCLEROSING CHOLANGITIS-INFLAMMATORY BOWEL DISEASE IS ASSOCIATED WITH AN INCREASED FREQUENCY OF POST-TRANSPLANT COLONIC LYMPHOMA**

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**Introduction** Post-transplant lymphoproliferative disease (PTLD) is a recognised complication of liver transplantation (LT). Although small intestinal involvement is common, factors predisposing to colonic disease are not well characterised.

**Methods** A case-note review of all patients undergoing liver transplantation (1982–2013) was performed, and subsequently cross-referenced with an institutional lymphoma database comprising all biopsy-proven PTLD cases to date. Putative risk factors for development of colonic lymphoma were analysed using SPSSv21.

**Results** Over a 31-year adult 'first liver' transplant experience (No. of recipients=2872), 72 cases of post-LT lymphoproliferative disease were identified and most commonly observed in the context of primary biliary cirrhosis (PBC;  $n = 20$ ) and primary sclerosing cholangitis (PSC;  $n = 14$ ). Overall, intestinal involvement was observed in 18/72 patients, representing predominantly small bowel disease ( $n = 12$ ). Colonic lymphoma occurred only in individuals transplanted for PSC ( $n = 6$ ; median 5.0yrs post-transplant; IQR: 3.2–11.7), all of who had underlying colitis. In all cases, disease was a diffuse large B-cell lymphoma; however, only 2 patients had EBV-(LMP)-positive tumours, from which only 1 a detectable serum EBV-titre (qPCR). There were no significant associations with age at transplantation, male gender, treatment with azathioprine or tacrolimus, duration of azathioprine or calcineurin inhibitor exposure, or onset of colitis post-LT. Only one patient (each) with PTLD occurring in the context of cardiothoracic ( $n = 6$ ) and renal ( $n = 32$ ) transplantation developed large bowel disease, and under these circumstances was part of a disseminated lymphomatous process.

**Conclusion** PSC/colitis is associated with development of colonic lymphoma post-LT. Additional risk factors have yet to be identified, UKfied.

**Disclosure of Interest** None Declared.

#### **PWE-153 COST EFFECTIVENESS OF RIFAXIMIN-A IN THE REDUCTION OF RECURRENCE OF OVERT HEPATIC ENCEPHALOPATHY**

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