

lives of people with alcohol-related liver disease (ARLD) by failing to provide early intervention and specialist consultant input.¹

Methods We aimed to review the management of patients with decompensated liver disease in the first 24 h after admission to hospital. This was a region-wide audit including all Trusts in the Northern Deanery. An audit proforma was designed and data collected on consecutive admissions over a 3 month period.

Results 139 patients were included in the study; 69% male, median age 54 years (range 26–86 years). ARLD was the cause of liver disease in 88%. The median MELD score was 19 (range 6–39) and 88% had Child-Pugh Grade B or C disease. The commonest reasons for admission were ascites (28%), GI bleeding (21%), encephalopathy (19%) and jaundice (16%).

There was a 9% mortality rate during the admission and average length of stay was 15 days.

82 patients had clinical ascites; 62% had a diagnostic tap within 24 h of admission, 21% waited >24 h and 17% did not have a diagnostic tap. 18% had spontaneous bacterial peritonitis (SBP).

Previous alcohol history was only documented in 43% but current daily consumption was documented in 81%. Of patients with documented current alcohol excess, 92% received pabrinex and 94% were started on CIWA.

99% had their renal function checked on admission. 26% had renal impairment; 28% of whom did not have all their nephrotoxins stopped. Hyponatraemia (sodium <125 mmol/L) was present in 9%; 42% of whom did not have diuretics stopped.

27 (19%) patients had known or suspected variceal bleeding. 19% did not receive terlipressin and 30% did not receive vitamin K. 67% of patients had an upper GI endoscopy within 12 h of admission, and 78% within 24 h.

Hepatic encephalopathy was present in 32% of patients and lactulose commenced in 98%.

17% of patients were not seen by a consultant (any speciality) within 12 h of admission, 7% were not seen by a gastroenterology or hepatology consultant within 72 h of admission and 39% were not seen within 24 h.

Conclusion There are clear deficiencies in the acute management of patients with decompensated liver disease across the Northern region in keeping with the findings of the NCEPOD report. The findings of this audit will be shared across the region and we are instituting a 'care bundle' to focus on the key management of these patients and guide clinicians to improve patient care. We will re-audit to assess the impact of the 'care bundle' on patient care.

REFERENCE

- 1 http://www.ncepod.org.uk/2013report1/downloads/Measuring%20the%20Units_summary%20report.pdf

Disclosure of Interest None Declared.

PTU-114 HEPATOLOGY SPECIALIST NURSE LED EXTERNAL JUGULAR VENEPUNCTURE; IS IT SAFE AND EFFECTIVE?

LD Morris*, S Frayne, J Wadsworth, M Mansoor, Y Reddy. *Department of Gastroenterology and Hepatology, East Lancashire Hospitals NHS Trust, Blackburn, UK*

10.1136/gutjnl-2014-307263.188

Introduction Difficult venous access is a significant problem for a proportion of patients with chronic hepatitis C and a history of intravenous drug use. It can impede access to treatment and cause distress for the patient. Sampling blood through external

jugular venepuncture (EJV) is highly successful. This enables more patients to be assessed and treated with antiviral therapy whilst participating in clinical trials. Our aim was to assess the efficacy of an EJV service in a large district general hospital, led by a Hepatology Specialist Nurse.

Methods Data was collected prospectively, recording the number of attempts needed to successfully complete EJV. All procedures were performed by an experienced hepatology nurse. Patients who underwent EJV were invited to provide feedback on overall satisfaction.

Results Between February 2012 and October 2013, external jugular venepuncture was attempted on 130 occasions in 57 chronic hepatitis C patients. The mean age of the patients was 39 (range 30–61) and there were 46 males and 11 females. Genotype distribution was mostly 3a (46%) and 1a (33%). 80% of EJV procedures (n = 103) were performed successfully on the first attempt, rising to 92% on the second attempt. In five patients (8%), EJV failed due to: previous neck surgery (1), vein thrombosis (3) and patient anxiety (1). No procedural complications were reported. Patient experience was 100% positive.

Conclusion External jugular venepuncture is a useful method of blood sampling from patients with chronic hepatitis C and difficult venous access, allowing for monitoring of their therapy. A Specialist Nurse Led EJV service is safe, effective and is well received by patients. Due to this success, a number of our patients have been enrolled in clinical trials.

Disclosure of Interest None Declared.

PTU-115 IDENTIFYING NAFLD IN PATIENTS ATTENDING A LIPID CLINIC – DO NON-INVASIVE SCORING SYSTEMS FOR FIBROSIS HAVE A ROLE?

L Wong*, M Roberts, R McCorry. *Gastroenterology, University Hospital of South Manchester, Manchester, UK*

10.1136/gutjnl-2014-307263.189

Introduction Hyperlipidaemia is a recognised risk factor for the development of non-alcoholic fatty liver disease (NAFLD). Aspartate aminotransferase (AST):alanine aminotransferase (ALT) ratio, AST-to-Platelet Ratio Index (APRI) and Fibrosis-4 (FIB-4) scores are validated, indirect, non-invasive methods which can be employed to exclude the possibility of hepatic fibrosis in the context of NAFLD.¹ The aim of this study was to apply these indices to patients attending a lipid clinic, with an elevated ALT to determine what proportion would merit further hepatology assessment.

Methods We performed retrospective analysis of patients attending a lipid clinic in a university teaching hospital from 2011–2013. None of the patients were under gastroenterology/hepatology follow-up. In those with elevated ALT (>30 IU/L male, >19 IU/L female²) we calculated the AST:ALT ratio, APRI and FIB-4 scores.

Results 130 patients were included (68 male, 62 female; mean age 54 (17–93)). Platelet data was available for 113 patients and 69 (53.0%) had elevated ALT (52% male). In these patients the scoring systems demonstrated an AST:ALT ratio >0.8 in 32 (46.4%), APRI >0.51 in 20 (30.0%) and FIB-4 >1.46 score in 14 (20.3%). 11 (15.9%) had high scores across all 3 indices.

Conclusion We have demonstrated that a significant proportion of patients with lipid abnormalities and raised ALT may be at risk of NAFLD with fibrosis. By using a composite of these scoring systems it may be possible to identify those who would

benefit most from assessment in hepatology outpatients with staging of fibrosis.

REFERENCES

- 1 Stuart McPherson, Stephen F Stewart, Elsbeth Henderson, Alastair D Burt, Christopher P Day. Simple non-invasive fibrosis scoring systems can reliably exclude advanced fibrosis in patients with non-alcoholic fatty liver disease. *Gut* 2010;59:1265–1269
- 2 Prati D, Taioli E, Zanella A, Della Torre E, Butelli S, Del Vecchio E, Vianello L, Zanuso F, Mozzi F, Milani S, Conte D, Colombo M, Sircchia G. Updated definitions of healthy ranges for serum alanine aminotransferase levels. *Ann Intern Med* 2002 Jul 2;137(1):1–10

Disclosure of Interest None Declared.

PTU-116 INTER-RELATIONSHIPS BETWEEN PARAMETERS OF IRON OVERLOAD AND THEIR ASSOCIATION WITH LIVER FIBROSIS SEVERITY IN HAEMOCHROMATOSIS

LL Wong*, E McFarlane, M Karajeh, D Gleeson. *Hepatology, Sheffield Teaching Hospitals, Sheffield, UK*

10.1136/gutjnl-2014-307263.190

Introduction In the current era of routine HFE genotyping for suspected haemochromatosis, venesection is performed in C282Y homozygous patients with milder iron overload than was previously the case. It is thus useful to re-evaluate inter relationships between parameters of iron overload and their association with severity of liver fibrosis. We aimed to evaluate these relationships in C282Y homozygous patients undergoing venesection for iron overload.

Methods Retrospective analysis of departmental haemochromatosis database. We included 114 C282Y homozygous patients (76 men, age [median (range) 54(24–78)] years, who had elevated serum ferritin and had undergone venesection therapy. Data analyses included Pearson regression, Mann-Whitney testing and Cox multiple regression analysis.

Results At presentation, serum ferritin was 1018 (111–8179 mg/L and serum% iron saturation was 79% (29 – 99%). 73 patients had available liver histology, which showed Pearl grade 4 (0–4) siderosis (the 1 patient with grade 0 siderosis had serum ferritin of 6035 and required removal of 34 units of blood). Ishak fibrosis score was 1(0–6). 15 patients had cirrhosis. Patients underwent venesection of 14 (3–100) units of blood at 1–2 week intervals until serum ferritin fell to the lower end of the normal range. The number of units of blood removed to achieve this correlated significantly with baseline serum ferritin (Pearson $r = 0.62$ $p < 0.001$), serum iron saturation ($r = 0.36$ $p < 0.001$), liver siderosis grade ($r = 0.39$ $p < 0.001$) and (in 16 cases where measured) liver iron concentration ($r = 0.91$ $p < 0.03$). These iron storage parameters showed no correlation with age of presentation but were all higher (except siderosis grade) in men than in women ($p < 0.01$ – 0.001). Ishak fibrosis score correlated positively with number of units venesected ($r = 0.64$; $p < 0.001$), liver iron content ($r = 0.75$ $p < 0.01$), baseline serum ferritin ($r = 0.68$ $p < 0.001$) and iron saturation ($r = 0.34$ $p < 0.01$) but was not significantly associated with age, gender, known alcohol excess ($n = 25$) or steatosis on liver biopsy ($n = 24$). Patients with cirrhosis had higher baseline serum ferritin (2523 (680–6908) vs 1018 (111–8179) mg/L $p < 0.001$) and had more units venesected (42 (18–100) vs (14 (3–69) $p < 0.001$) than those without. In Cox multiple regression analysis, liver fibrosis stage was independently associated with baseline serum ferritin and number of units venesected (both $p < 0.001$) but was not associated with age, gender, known alcohol excess or steatosis.

Conclusion In C282Y homozygous patients, severity of overload, assessed by baseline serum ferritin and number of units venesected, is the main determinant of liver fibrosis severity, which is not associated with age, gender, presence of liver steatosis or known alcohol excess.

Disclosure of Interest None Declared.

PTU-117 CUTANEOUS STIGMATA OF CHRONIC LIVER DISEASE; WHAT DO THEY MEAN?

L Vine*, G McCracken, S Needs, N Ryley, K George. *Gastroenterology Department, Torbay Hospital, Torquay, UK*

10.1136/gutjnl-2014-307263.191

Introduction As clinicians we are taught to assess all patients for cutaneous signs of chronic liver disease (CLD). However, there is limited evidence available in the literature regarding their significance or prognostic value for diagnosing the presence or severity of CLD. The aim of this prospective study, therefore, was to assess the frequency and significance of cutaneous stigmata in patients with suspected CLD.

Methods Between 2006 and 2011 outpatients with suspected CLD attending for liver biopsy were assessed by an experienced gastroenterology registrar, who undertook the liver biopsy, and documented the presence of palmar erythema, Dupuytren's contracture, spider naevi, clubbing or gynaecomastia. Correlation between these cutaneous stigmata and the presence and degree of liver damage was assessed by the chi square test.

Results 124 consecutive outpatients underwent assessment and liver biopsy; 42 (34%) female and 82 (66%) male, median age 46 years (range 18–78). Bloods tests showed median bilirubin 11 $\mu\text{mol/l}$ (range 3–500), median ALT 74 IU/l (range 11–562) and median INR 1 (range 0.8–1.7). The commonest clinicopathological diagnoses were chronic hepatitis C 31%, non-alcohol related fatty liver disease 19% and alcohol related liver disease 12%. 19 patients had cirrhosis, 56 fibrosis and 49 had no fibrosis. Overall only 36/124 (29%) patients had any stigmata of CLD. 13/19 cirrhotic patients had stigmata compared to 23/105 non cirrhotic patients ($\chi^2 = 18.5$, $p < 0.001$). 26/75 patients with any degree of fibrosis had stigmata compared to 10/49 patients with no fibrosis ($\chi^2 = 1.8$, $p = \text{NS}$). 7 patients had 2 different stigmata of CLD, of whom 5 had cirrhosis and 2 had fibrosis. Females (14/42) were no more likely to have stigmata than males (25/82) ($\chi^2 = 0.1$, $p = \text{NS}$). Patients with viral hepatitis were no more likely to have stigmata than those with fatty liver disease ($\chi^2 = 1$, $p = \text{NS}$).

Conclusion Cutaneous stigmata of CLD are absent in the majority of patients with suspected CLD and a significant minority of patients with cirrhosis. This may contribute to the under diagnosis of chronic liver disease at all stages of severity.

Disclosure of Interest None Declared.

PTU-118 BACLOFEN AS AN ADJUNCT PHARMACOTHERAPY FOR THE MAINTENANCE OF ABSTINENCE IN ALCOHOL DEPENDENT PATIENTS WITH LIVER DISEASE

^{1,2}L Owens*, ²P Richardson, ³M Pirmohamed, ⁴A Rose. ¹University of Liverpool, UK; ²Hepatology, Royal Liverpool University Hospital Trust, UK; ³Molecular and Clinical Pharmacology, University of Liverpool, Liverpool, UK; ⁴Psychology, University of Liverpool, Liverpool, UK

10.1136/gutjnl-2014-307263.192