HCV antibodies requested, 49 (40%) were already known about. Of the remaining 73, 48 (66%) had no further investigation requested. Of these 48, 34 were not referred or investigated further (15 from primary care, 13 from secondary care, 6 from prisons). 13 were referred without PCR result, 11 did not attend (DNA'd) at first (6) or second (5) appointments, 2 have appointments outstanding and 1 had previously failed treatment but was not re-referred.

Abstract PWE-108 Figure 1

Conclusion The Hepatitis C action plan has failed to deliver. This audit demonstrates almost half the serology tests are unnecessary repeats, 2/3rd of true new positives never progress down the management pathway and only 3% access treatment.

Disclosure of Interest None Declared.

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PWE-119 HOSPITAL ADMISSION AND IN-HOSPITAL DEATHS FROM ALCOHOLIC LIVER DISEASE IN ENGLAND: ANALYSIS OF HOSPITAL EPISODE STATISTICS DATA

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Introduction Alcohol consumption is the third greatest risk factor for global disease, attributing to almost 4% of all deaths worldwide. Alcoholic liver disease (ALD) is one of the major causes of morbidity and mortality associated with long term high alcohol consumption. ALD is an ever increasing problem in England as previous studies have shown. However, little information exists on the trend of emergency admissions and the subsequent in-hospital mortality due to ALD.

Methods We carried out a retrospective analysis of emergency hospital admissions and in-hospital mortality for ALD in all NHS acute care hospitals in England between 2008/2009 and 2011/2012 using

National Health Service (NHS) Hospital Episode Statistics (HES) data. We examined the variation in admission and mortality by age, gender and Strategic Health Authority (SHA) in England. HES data are coded using ICD 10 which gives ALD a code of K70.

Results Over the four study year period overall emergency admissions due to ALD increased by 9%; from 17.40 per 100,000 to 18.98 per 100,000 populations. The largest increase in admission was observed for alcoholic hepatic failure with a 44.43% increase. In-hospital mortality from ALD decreased by 9.3% between 2008/09 and 2011/12 from 229.99 deaths to 208.50 deaths per 1,000 ALD emergency admissions. Male mortality was lower than female mortality with male mortality also having a higher decrease of 10.6% compared to 7.3% in females. The rate of mortality differed across age groups peaking in 75–84 year olds, however most age groups saw a decline in mortality rate with 35–44 year olds seeing the greatest decrease of 15.5%. Standardised mortality from ALD also varied by region with the highest mortality found in the West Midlands and on the South East Coast and lowest in London and The North East.

Conclusion ALD related emergency admission rates are still on the increase although not at the same rate as reported in previous studies conducted in the UK. Reduced in-hospital mortality for ALD over the years suggests that hospital care for ALD patients is improving. Continued attention and effort are required to a greater extent to reduce the deaths from ALD.

Disclosure of Interest None Declared.

PWE-120 LIVER BIOPSY USING 16 G NEEDLE: A COMPARATIVE STUDY

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Introduction Liver biopsy is considered gold standard tool to investigate liver disease and provides valuable information which guides management¹. Currently most liver biopsies in UK are performed under ultrasound guidance using size 18 gauge needles but the adequacy of biopsy specimen varies and sometimes suboptimal. The British Royal College of Pathologists recommend a specimen size of at least 1 cm and a minimum of 6 portal tracts², whereas the AASLD guidelines recommend a biopsy length of 2 cm, a minimum of 11 portal tracts for histological diagnosis and using 16 gauge needle.³

Methods Retrospective data from ultrasound guided liver biopsies performed in 2011 using 16 gauge co-axial biopsy needle was collected from radiology and pathology databases. Adequacy of biopsy specimen, diagnostic and complication rates were analysed and results compared to a similar group of patients in 18 gauge group at a tertiary centre in London.

Results 50 biopsies (n = 50) compared from both groups. Mean age 48 years (range 24–85). 56% were females (n = 28). Indications were chronic hepatitis B (n = 20), chronic hepatitis C (n = 9), NASH (n = 5), focal liver lesions (n = 5), haemochromatosis (n = 2), PBC/AIH (n = 2) and others (n = 7). All biopsies were performed by radiology fellows or consultants. 90% were non-targeted (n = 45) and majority were taken from the right lobe. The mean number of cores obtained in 16 gauge group were 2.08 (range 1–5) as compared to 1.46 (range 1–4) in 18 gauge group. The mean length of specimen in the 16 gauge group was 14 mm and the mean (±SD) number of portal tracts per biopsy were 15 (±8.145) as compared to 7.5 (±4.47) in the 18G group (p < 0.001). The specimen was diagnostic in 96% in 16 gauge group as compared to 90% in 18 gauge group. 5 patients had metastatic lesions and were excluded from analysis. There were no major complications in either groups and one patient in the 16 G group died due to underlying metastatic cancer within 30 days of biopsy.

Conclusion Liver biopsy performed using 16 gauge co-axial needle improves specimen quality and increases diagnosis rate significantly

compared to 18 gauge needle. Despite being a larger bore needle, it is not associated with an increased rate of complications. We recommend using 16 gauge co-axial needles routinely for percutaneous liver biopsies.

Disclosure of Interest None Declared.

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PWE-121 COMPARISON OF KINGS SCORE, APRI AND AST/ALT RATIO IN DETERMINING SEVERITY OF LIVER DISEASE VERSUS LIVER BIOPSY

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Introduction Background and Aims Non-invasive markers of liver fibrosis are used to stratify the severity of Liver disease. The aim of the study was to compare the accuracy of the AST/ALT ratio, AST-platelet ratio index (APRI), and the Kings score in determining significant liver disease using liver biopsy as the reference standard.

Methods A retrospective analysis of patients presenting for liver biopsy at the South West liver unit was reviewed. All patients had routine demographic, biochemical and haematological parameters collected including: aspartate aminotransferase (AST), alanine aminotransferase (ALT), platelets, international normalised ratio (INR) and patient age. The quality of the liver biopsy specimen was recorded including sample length, fragments, and number of portal tracts. Liver biopsy fibrosis was staged using the Ishak score. Non-invasive tests were assessed in their ability to correctly identify significant fibrosis (Ishak stage $\geq$ F3) or cirrhosis (Ishak Stage $\geq$ F5). The scores were calculated as follows: AST/ALT; APRI = ((AST/AST upper limit of normal)/(Platelets) $\times$ 100, and Kings score = (AST $\times$ Age $\times$ INR)/platelets. The accuracy of each test was compared to the reference standard using area under the receiver operated characteristic curve (AUROC).

Results 170 patients were identified. 130 patients had complete data to calculate the scores. The median age 56 years (IQR 45–65), 55% patients were male. Numbers of patients by disease were: autoimmune hepatitis n = 23 (18%), PBC n = 3 (2.3%), PSC n = 2 (1.6%), Fatty Liver disease n = 24 (19%), ALD n = 26 (20%), HCV n = 12 (9.3%), Others n = 40 (30%). The median biopsy length 20mm (17–26), portal tracts 9 (5–13), biopsy cores 2 (1–2). AUROC for significant fibrosis ($\geq$ F3) : AST/ALT = 0.84 (0.77–0.91), $p < 0.0001$, Kings Score = 0.73 (0.64–0.83), $p < 0.0001$, APRI = 0.69 (0.60–0.79), $p < 0.0001$. AUROC for cirrhosis ($\geq$ F5): AST/ALT = 0.82 (0.75–0.90), $p < 0.0001$, Kings Score = 0.71 (0.61–0.80), $p < 0.0001$, APRI = 0.66 (0.57–0.76), $p < 0.0001$.

Conclusion The AST/ALT ratio had the greatest diagnostic accuracy in determining significant fibrosis or cirrhosis. The Kings score performed better than APRI. AST/ALT is a simple guide to determine significant fibrosis and cirrhosis in liver disease.

Disclosure of Interest None Declared.

PWE-122 PARALLEL TIPSS FOR THE MANAGEMENT OF SHUNT INSUFFICIENCY IN PATIENTS WITH COMPLICATIONS OF PORTAL HYPERTENSION: A TERTIARY LIVER UNIT 19 YEAR EXPERIENCE

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Introduction Transjugular Intrahepatic Porto-Systemic Shunts (TIPSS) insufficiency can be addressed with a side placement of another TIPSS beside the original ("parallel" technique) thus improving portosystemic pressure gradient (PPG). There is a paucity of data assessing the efficacy of this technique.

The Aim of this study was to assess the efficacy of parallel TIPSS in a large UK tertiary referral centre.

Methods A retrospective study was performed from patient electronic databases. Parallel TIPSS were performed over a 19 year period.

Results 11 patients (8M:3F) were identified (2% of all TIPSS procedures). Mean age at time of parallel TIPSS was 48.6(+/-13.7). Background aetiology of portal hypertension included: 5 ALD, 2 PSC, 2 PBC, 1 liver graft failure, 1 NCPH. Indications for index TIPSS (5 covered stents) were: 4 Oesophageal variceal (OV) haemorrhage, 3 gastric variceal (GV) haemorrhage, 1 stromal variceal haemorrhage and 3 for refractory ascites. At time of 1st TIPSS, documented mean PPG was 16.6(+/-7.71) and post TIPSS 10.8(+/-7.35) mmHg. Median time between index TIPSS and parallel TIPSS insertion was 72 days (IQR 4–1122 days). Prior to parallel stent placement, 7 patients had dilatation of the index TIPSS.

At parallel TIPSS, the mean initial PPG was 16.0 (+/-7.40)/post procedure 6 (+/-2.28) mmHg. 63% had covered stent as the parallel TIPSS. One patient had transient encephalopathy, but no other complications were encountered. Nine patients had a resolution in symptoms. One patient had ongoing GV bleeding requiring Thrombin injection and 1 patient had ascites with no flow in parallel TIPSS 4 days post-procedure. Secondary patency was 82% with a median number of interventions of 1.5 (IQR 1–3).

Median follow-up was 30 months (range 0.5–120). 92% patients were alive at 1 month with 86% 1 year survival. Two patients were transplanted during follow-up.

Conclusion Parallel TIPSS is a safe and effective method to treat TIPSS insufficiency. The majority of patients not only had a good haemodynamic result, but also resolution of symptoms.

Disclosure of Interest None Declared.

PWE-123 PREDICTORS OF HEPATIC ENCEPHALOPATHY AND MORTALITY FOLLOWING TIPS INSERTION FOR REFRACTORY ASCITES

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Introduction Transjugular intrahepatic portosystemic shunt (TIPS) insertion has been used for over twenty years to treat the complications of portal hypertension. TIPS insertion provides better control of refractory ascites than large volume paracentesis but with a higher risk of developing hepatic encephalopathy (HE). In addition, a survival benefit has only been found in carefully selected patients. The aims of this study were to review the use of TIPS for the treatment of refractory ascites, in a single centre, over a twenty-year period with the aim of identifying factors predictive of the development of HE and survival.

Methods All patients who underwent TIPS for refractory ascites in the Royal Free Hospital, London, between 1992 and 2012 were reviewed. All non-transplanted patients still alive in 2012 were recalled for assessment of their neuropsychiatric status using clinical, neuropsychometric and neurophysiological criteria. The factors associated with the development of post-TIPS HE were determined by multivariate analysis using the Cox proportional regression model. Differences in survival were determined by Kaplan-Meier analysis.