serial measurement of aFP in patients with liver cirrhosis in contrast to European and American guidelines.

Disclosure of Interest None Declared.

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PWE-116 LIVER STIFFNESS MEASUREMENT PREDICTS RESPONSE TO ANTI-VIRAL TREATMENT IN PATIENTS WITH CHRONIC HEPATITIS C GENOTYPE 3

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Introduction Chronic hepatitis C virus infection (HCV) is a common cause of cirrhosis and end-stage liver disease. Pegylated interferon (PEG-IFN) and ribavarin (RBV) is currently the treatment of choice for genotype 3 (G3) HCV resulting in a sustained virological response (SVR) in 70–80%. Advanced fibrosis is known to be associated with failure of antiviral therapy. Increasingly, liver stiffness measurement (LSM) is being used to non-invasively assess fibrosis. However, it is not known whether LSM predicts response to antiviral therapy and whether there are predictive cut-offs. Our aim was to assess whether baseline LSM can predict SVR in HCV G3 patients treated with PEG-IFN+RBV.

Methods Retrospective review of outcomes in naive patients with HCV G3 treated with PEG-IFN+RBV in our clinic from Jan 2007 to Oct 2011. Post transplant and co-infected patients were excluded. Patients with a valid LSM within 1 year of starting treatment who completed > 12wks and recorded outcome of treatment were included in the LSM analysis.

Results 144 patients (mean age 40±10 years, 56% male, 16% cirrhotic, and 42% high viral load) received PEG-IFN+RBV for HCV in the study period. 92% completed > 12 wks treatment. 92 (64%) of patients had a valid LSM (median 6.5kPa; 3.5kPa to 39.1kPa). 24% had a LSM > 10.6kPa consistent with advanced fibrosis. The overall SVR rate was 68%. 11% were lost to follow up and the outcome unknown. LSM was significantly associated with SVR ($p = 0.001$). The AUROC for LSM in predicting treatment response was 0.74 (95% CI 0.58–0.90). The optimum cut-off to predict non-SVR was 10.6kPa (69% sensitivity, 85% specificity). 90% with LSM ≤ 10.6kPa achieved SVR versus 47% with LSM > 10.6kPa ($p < 0.001$). All patients with low viral load (< 600,000 IU/ML) and LSM < 10.6 kPa who had > 12 wks treatment achieved SVR (n = 33).

Conclusion Fibrosis assessed non-invasively with LSM can help predict response to antiviral therapy in patients with HCV G3. LSM (> or < 10.6kPa) could be factored into treatment algorithms to determine the optimum treatment course lengths.

Disclosure of Interest None Declared.

PWE-117 PREVALENCE OF FALLS IN THE UK PBC POPULATION

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Introduction Previous studies have documented the prevalence of falls in PBC in a geographical area but there is no published data on the prevalence of falls in a national UK PBC cohort. Prevalence of falls was reported as 70% in the Newcastle-upon-Tyne cohort. Risk factors for falls are known to be prevalent in people with PBC, particularly autonomic dysfunction and lower limb muscle weakness and combined with the high prevalence of osteoporosis this carries a significant risk to the patient from falls and falls related injuries with the associated healthcare and financial implications. This study aimed to assess the prevalence of falls in the National PBC cohort as well as associated falls related injuries and related hospital admissions. We also explored the relationship between falls and autonomic symptoms.

Methods Symptom assessment tools were completed by patients as part of the UKPBC genetics study. Information about falls and associated injuries was collected using a standardised data capture tool and autonomic symptoms were quantified using the Orthostatic Grading Score.

Results Data was collected on 2328 patients with PBC from all around the UK. 862 (37%) of PBC patients had fallen, 118 (8%) were current fallers (one fall within the past year) and 414 (17.7%) were recurrent fallers (more than one fall in the past year). 35% of patients attended A&E following their fall with 9.7% of fallers requiring admission as a consequence of their fall and 24% of PBC patients who fell sustained a fracture.

Fallers were significantly more likely to be diabetic (diabetes present in 5.7% of non-fallers and 12.2% of fallers, $p < 0.0001$) and more likely to be taking cardioactive medication (29% in non-fallers and 71% in fallers, $p < 0.0001$). Autonomic symptoms were significantly more prevalent in those PBC patients with recurrent falls (mean OGS 5.44, SD 4.15) compared to non-fallers (mean OGS 2.38, SD 2.13)and infrequent fallers (mean OGS 3.2, SD 3.36) $p < 0.0001$.

Conclusion A significant percentage of patients with PBC are falling, sustaining fractures and being admitted to hospital following a fall. This has huge implications for patients with PBC in terms of morbidity, mortality and quality of life. The high prevalence of autonomic symptoms in the population that fall demonstrate the importance of considering this symptom in all PBC patients as there are a number of interventions that can be implemented. Patients that fall often have more than one risk factor and this study demonstrated this as autonomic symptoms, diabetes and the presence of cardioactive medications were all more common in the cohort of fallers therefore all patients with PBC need a careful assessment for the presence of falls risk factors and a multidisciplinary approach to reduce the risk of falls.

Disclosure of Interest None Declared.

PWE-118 AN AUDIT OF HEPATITIS C TESTING AND REFERRAL PATTERNS

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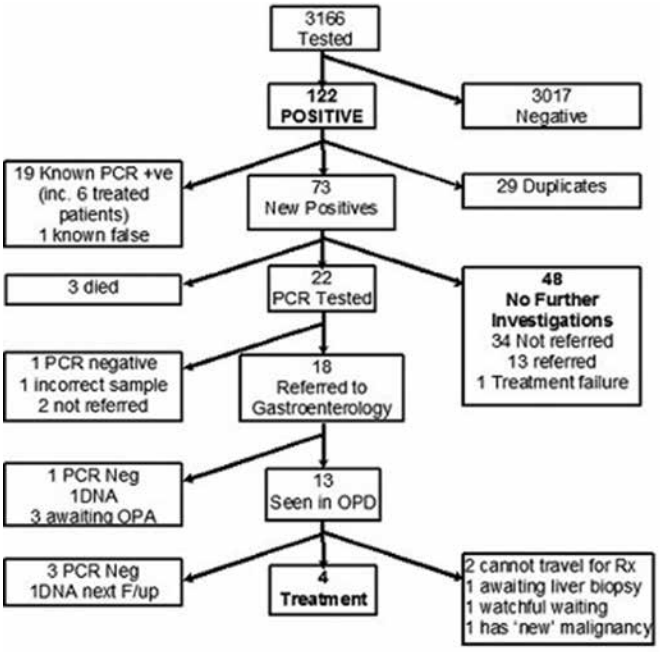
Introduction The Hepatitis C action plan of 2004 identified a need to "reduce the level of undiagnosed infection and provide better, more co-ordinated pathways of care for people with hepatitis C, from their initial diagnosis to specialist care and treatment"(1). Our aim was to audit the outcome of Hepatitis C testing in a large secondary care facility in UK against the established management pathway (2).

Methods Using the hospital microbiology database, we identified 3166 requests for hepatitis C serology from January to December 2011. All positive results were retrospectively analysed at least 12 months after test requests, to include: referral source, demographics, route of acquisition etc. In addition, evidence of HCV PCR testing, outpatient referral and outcomes were sought from referrers and laboratory records.

Results Age range of Hepatitis C positives was from 10 months to 71 years. 41% referrals came from primary care and drug dependence services, 30% from medical service, 5% from obstetrics and 5% from GUM. 76% had acquired HCV from intravenous drug use. Alcohol dependence was recorded in 34%. Of 122 positive

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 management[1].Currently most liver biopsies in UK are performed under ultrasound guidance using size 18 guage 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 tracts [2], whereas the AASLD guidelines recommend a biopsy length of 2 cm, a minimum of 11 portal tracts for histological diagnosis and using 16 guage 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), haemochromotosis (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