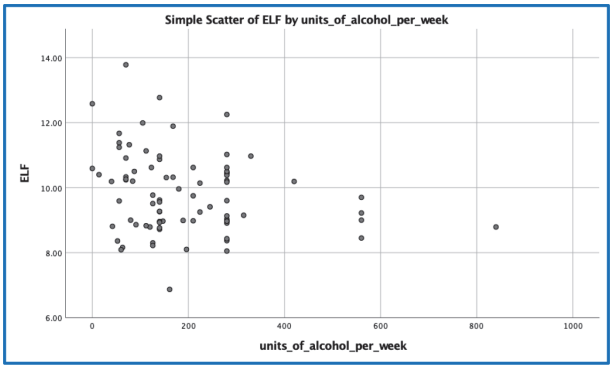


Abstract 210 Figure 1

associated with ELF score in multiple linear regression analysis, p = 0.168 (when adjusted for age, ALP, ALT, MCV, platelets and bilirubin) or when using binary ELF threshold of 10.5 (p = 0.366, OR 0.996, 95% CI 0.988–1.004). Neither BMI nor deprivation decile were associated with ELF score.

Conclusion In this cohort of patients with AUD, the amount of alcohol ingested was not associated with the ELF score suggesting that alcohol ingestion does not directly influence ELF results in AUD. ELF testing indicated that over a quarter of this cohort had advanced fibrosis, and 14% had cirrhosis (ELF≥ 10.5 and ≥11.3 respectively) in line with the literature. Further studies examining effects of alcohol unit thresholds on risk of liver fibrosis would be beneficial.

P211 ALCOHOL USE DISORDERS AND LIVER FIBROSIS – CASES ARE MISSED THROUGH FAILURE TO TEST

[1,2]Freya Rhodes*, [1,2]Sara Cococcia, [3]Declan Connoley, [1]Preya Patel, [1,2]William Rosenberg. *[1]Institute of Liver and Digestive Health, UCL, London, UK; [2]Department of Hepatology, The Royal Free London NHS Foundation Trust, London, UK; [3]Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Australia*

10.1136/gutjnl-2020-bsgcampus.286

Background and Aims Alcohol Use Disorders (AUD) account for 7.2% hospital admissions per year in the UK. While a proportion of these people are recognised to have liver disease and are managed by liver specialists, many are managed by a wide range of physicians and their liver disease may be missed even if their AUD is recognised. We aimed to use non-invasive tests for liver fibrosis to investigate the prevalence of occult liver disease in patients recognised to have AUD but not known to have liver disease.

Methods Prospective service evaluation of liver fibrosis in consecutive patients referred to the Alcohol Specialist Nurse (ASN) at the Royal Free Hospital from Nov' 2018-Dec' 2019. Patients were excluded if they were already known to have liver disease. Liver fibrosis was assessed using the Enhanced Liver Fibrosis (ELF) test performed on serum extracted from 5 ml of blood, analysed on an Advia Centuar. Patient demographic, blood test and imaging data were recorded along with alcohol histories. Patients with ELF scores ≥10.5 were invited for fibroscans and outpatient hepatology assessments.

Results We included 100 patients (69% male, mean age 53.15 ± 14.3). Median alcohol intake was 140 units/week (IQR 79.1–280), with duration of excess alcohol of 15 years (IQR 10–29). The commonest reason for presentation to hospital was symptomatic alcohol withdrawal (n=36/100). Other reasons included falls/trauma (13%), pancreatitis (9%), mental health (12%), GI bleed (5%) and 'other' (25%). None had a prior history of liver disease. Four patients had documented signs of CLD. Liver function tests, checked in 96/100 patients were abnormal in 64/96 (64%). ELF scores ranged from 6.87–13.78, median 9.66 (IQR 8.94–10.6). Of the total cohort, 29/100 (29%) had an ELF score ≥10.5. Of these, 29.6% had normal LFTs. 76% had previously attended A&E in the last 5 years, (median number of presentations = 4, IQR 2–9) without assessment or diagnosis of liver disease.

Conclusion Over a quarter of patients in this cohort with AUD had evidence of advanced liver fibrosis that had been undetected prior to 'opportunistic' ELF testing. The vast majority had had recent hospital attendances representing additional missed opportunities for investigating liver disease. LFTs cannot be relied upon to for detection of liver disease in AUD. We propose that clinicians consider using non-invasive tests to assess liver fibrosis in all patients admitted to hospital with AUD.

P212 EXPLORING BIOCHEMICAL AND IMMUNOLOGICAL PREDICTORS BETWEEN ACUTE AUTOIMMUNE HEPATITIS AND DRUG INDUCED LIVER INJURY

[1]Faith Rickard*, [2]James Hodson, [1,2]Stefan Hubscher, [2]Ahmed Elsharkawy, [1,2]Ye Oo. *[1]University Of Birmingham, Birmingham, UK; [2]University Hospital Birmingham NHS Foundation Trust, Birmingham, UK*

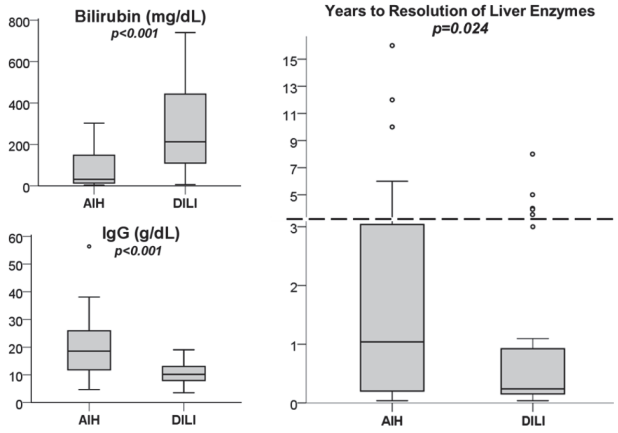
10.1136/gutjnl-2020-bsgcampus.287

Introduction Differentiating between acute autoimmune hepatitis (AIH) and acute drug induced liver injury (DILI) remains a major diagnostic challenge, as there are no definite pathognomonic biochemical, immunological or histological features for either condition. We aimed to explore markers that may help to ascertain the correct diagnosis and thereby prevent unnecessary long term use of immunosuppression in DILI.

Methods A retrospective case-note review of patients presenting with acute hepatitis at University Hospital Birmingham from 2010–2018. Data are reported with p-values from Fisher's exact tests or as a median with Mann-Whitney tests as applicable. Significance was set as p<0.05. Histological analysis is ongoing.

Results A total of 28 patients with acute presentation of AIH and 42 patients with DILI were identified. The age at presentation was similar in the two groups (median: 56 vs. 55 years), with a preponderance of females in the AIH group (79% vs. 48% of DILI, p = 0.013). AIH patients were significantly more likely to be ANA (82% vs. 17%, p < 0.001) or SMA (68% vs. 17%, p < 0.001) positive and to have significantly higher IgG (median 19 vs. 10 g/dl, p < 0.001).

At presentation, AIH and DILI patients had similar levels of AST, ALT and GGT. DILI patients had significantly higher ALP (median 258 vs. 126 U/L, p = 0.006), bilirubin (median 213 vs. 32 mg/dl, p < 0.001) and MELD scores (median 19 vs. 10, p = 0.001) but significantly lower ALT/ALP ratios (0.6 vs. 2.1, p = 0.048). Resolution of liver enzymes took significantly longer in the AIH group (median 54 vs. 13 weeks, p = 0.024). Liver histology is under review in both cohorts. All patients with acute AIH were treated with steroids, compared to 24% of those with DILI.



Abstract P212 Figure 1 Comparison for bilirubin, IgG positivity and years until resolution of liver enzymes between the AIH and DILI groups

Conclusions ALT/ALP ratio, Bilirubin >100, and high MELD scores are useful in differentiating diagnosis of acute AIH vs. DILI. Furthermore, the higher ALT/ALP ratio indicates AIH is predominately a hepatitic process, whereas DILI more commonly has a mixed hepatitis/biliary profile.

P213 OBETICHOLIC ACID IMPROVES HEPATIC FIBROINFLAMMATION ASSESSED BY MULTIPARAMETRIC MRI: INTERIM RESULTS OF THE REGENERATE TRIAL

[1]Rohit Loomba, [2]Quentin Anstee, [3]Stephen Harrison, [4]Arun Sanyal, [5]Vlad Ratziu, [6]Zobair Younossi, [6]Zachary Goodman, [7]Pierre Bedossa, [8]Rajarshi Banerjee, [9]Michael Stenkilsson, [9]Reshma Shringarpure, [9]Luna Zaru, [9]Aditya Venugopal, [9]Leigh MacConell, [10]Mary Rinella, [11]Lynsey Corless*. [1]*University of California, San Diego, USA*; [2]*Institute of Clinical and Translational Research, Newcastle University, UK*; [3]*Pinnacle Clinical Research Center, USA*; [4]*Virginia Commonwealth University, USA*; [5]*Hôpital Pitié–Salpêtrière, France*; [6]*Inova Health System, USA*; [7]*Hôpital Beaujon, France*; [8]*Perspectum Diagnostics, UK*; [9]*Intercept Pharmaceuticals, USA*; [10]*Feinberg School of Medicine, Northwestern University, USA*; [11]*Hull University Teaching Hospitals NHS Trust, UK, UK*

10.1136/gutjnl-2020-bsgcampus.288

Introduction A Month 18 interim analysis of REGENERATE showed that treatment with obeticholic acid (OCA) improved fibrosis and steatohepatitis based on liver histology in patients with nonalcoholic steatohepatitis (NASH). However, liver biopsy has several limitations and development of noninvasive tools for diagnosis and monitoring of NASH is warranted. Here, we evaluate the effects of OCA on multiparametric, MRI-derived, iron-corrected T1 (cT1) mapping.

Methods Multiparametric MRI by Liver*MultiScan* was performed in a subset of REGENERATE patients with fibrosis stage 2–3 (N=20) randomised 1:1:1 to placebo (n=7), OCA 10 mg (n=6), or OCA 25 mg (n=7). Changes in cT1 and liver fat content were evaluated after 18 months of treatment.

Results At baseline, mean (SD) cT1 was similar across all groups (856.7 [106.8] ms; 943.2 [116.11] ms; and 882.1 [94.75] ms in placebo, OCA 10-mg, and OCA 25-mg groups, respectively); elevated values reflect definite steatohepatitis and significant fibrosis. After 18 months of treatment, a dose-dependent reduction in cT1 was observed with a mean change from baseline of -91.7 ms in the OCA 25-mg group and -59.6 ms in the OCA 10-mg group, compared to -1.4 ms in the placebo group. Mean liver fat content at baseline was 16.29% (placebo), 19.27% (OCA 10 mg), and 15.3% (OCA 25 mg). Modest reduction (–7.9%) in fat content was noted with OCA 25-mg as early as 6 months and was generally sustained through Month 18 (figure 1).

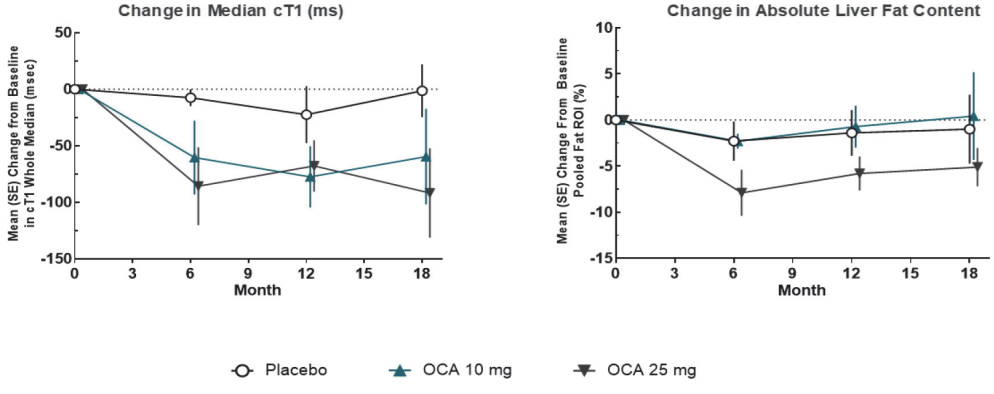
Conclusions Treatment with OCA resulted in dose-dependent improvements in cT1 and liver fat content by multiparametric MRI, which may be consistent with histologic improvements in steatohepatitis and fibrosis, and in serum-based noninvasive markers of steatohepatitis and fibrosis (Anstee 2019). The REGENERATE study remains ongoing and will continue through clinical outcomes for verification and description of clinical benefit.

P214 PREDICTED RISK OF END STAGE LIVER DISEASE UTILIZING THE UK-PBC RISK SCORE IN PBC PATIENTS

[1]David Jones, [2,3]Marco Carbone, [4]George Mells, [5]Alexander Liberman, [5]Elizabeth Smoot Malecha, [5]Leigh MacConell, [6]Kuldip Digpal*. [1]*Institute of Cellular Medicine-Newcastle University, UK*; [2]*Academic Department of Medical Genetics-University of Cambridge, UK*; [3]*Center for Autoimmune Liver Disease-University of Milan Bicocca, Italy*; [4]*Academic Department of Medical Genetics-University of Cambridge, UK*; [5]*Intercept Pharmaceuticals, USA*; [6]*Intercept Pharmaceuticals, UK*

10.1136/gutjnl-2020-bsgcampus.289

Introduction The UK-PBC Study group developed and validated a long-term prognostic model of primary biliary cholangitis (PBC) based on data from ~3000 patients (pts) with PBC. The model uses albumin, platelets, alanine



Abstract P213 Figure 1 Fibroinflammatory disease and fat content by multiparametric MRI