3. https://www.bsg.org.uk/wp-content/uploads/2019/12/BSG-BASL-Decompensated-Cirrhosis-Care-Bundle-First-24-Hours.pdf

| P206 | GEOGRAPHICAL VARIATION OF CHRONIC LIVER DISEASE RISK FACTORS ACROSS THE UK |

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Introduction Chronic liver disease (CLD) is a largely preventable condition with increasing burden on NHS resources. The aim of this study was to determine geographical variation in liver risk factors for CLD and association with regional Gross Disposable Household Income (GDHI).

Methods Between 2018–2019, a cross-sectional survey was conducted across the UK to screen for obesity, alcohol intake, diet, and viral hepatitis. In 2019, liver transient elastography (FibroScan) measurement was introduced. Spearman's correlation coefficient (r_s) was used to assess linear relationships between ordinal and discrete variables.

Results We analysed the data from 2152 individuals aged 18+ (males, $n=1092$, 51%; females, $n=1058$, 49%) across 25 UK towns. 24% ($n=519$) exhibited high-risk levels of alcohol consumption, 30% ($n=637$) had high-risk diets, 25% ($n=531$) were obese, and 33% ($n=704$) had risk factors for viral-induced liver disease. FibroScan readings were available for 1044 individuals. Male gender, >40 years of age, obesity, and a high-risk diet were associated with a FibroScan score >7 kPa in univariate analysis. In multivariate analysis, male gender (odds ratio [OR], 1.651; 95% confidence interval [CI], 1.164–2.341; $p=0.005$), >40 years of age (OR, 1.846; 95% CI, 1.192–2.860; $p=0.006$), and obesity (OR, 3.245; 95% CI, 1.927–5.465; $p<0.001$) were independent predictors of a FibroScan reading >7 kPa. Across UK towns, there was a weak negative association between FibroScan readings >7 kPa (range 9–26%) and GDHI ($r_s=-.309$, $p=0.355$). Disparity of CLD risk factors in UK towns (alcohol, 4–34%; diet, 17–53%; obesity, 11–34%; viral, 22–70%) was not significantly associated with GDHI ($r_s=0.026$, $-.264$, $-.277$, and $.117$, respectively).

Conclusions UK towns displayed noteworthy disparity in the prevalence of CLD risk factors, which was not adequately explained by regional economic performance. Further studies are required to explain this disparity, accounting for societal factors and comorbidities, to inform resource allocation and policy-making.

| P207 | TRANSIENT ELASTOGRAPHY MAY OVERESTIMATE RISK OF SEVERE FIBROSIS IN PATIENTS WITH PRIMARY SCLEROSING CHOLANGITIS |

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Introduction Primary sclerosing cholangitis (PSC) is a chronic, immune mediated cholestatic disease that leads to progressive liver fibrosis and cirrhosis. There is a need for reliable markers of disease activity and prognosis in patients with PSC. In recent years Transient Elastography has been validated as a non-invasive screening tool for severe fibrosis and cirrhosis in this patient cohort with cut-off values of 9.6 KPA for severe fibrosis and 14.4 KPA for cirrhosis.

Methods We retrospectively reviewed data from our PSC patient cohort to identify patients who had undergone a liver biopsy and transient elastography. We then used this data to work out sensitivity, specificity, positive predictive value and negative predictive value of transient elastography in PSC using a cut off of 9.6 KPA for severe fibrosis.

Results Data from 52 patients with PSC was available for this review. 16 patients had both liver biopsy and transient elastography. 5 patients had liver stiffness > 9.6 kpa and 3 had a liver stiffness of >14.4 KPA. 1 of the 5 patients had cirrhosis and had a liver stiffness of 22.6KPA. None of the remaining 4 had severe fibrosis or cirrhosis. Of the 11 patients with liver stiffness < 9.6 KPA, 1 had bridging fibrosis on biopsy. Using a cut off of 9.6KPA, the sensitivity, specificity, positive predictive value and negative predictive value for severe fibrosis was 50%, 71%, 20% and 91% respectively. All 5 patients with liver stiffness of >9.6 kpa had an ALP > 247 IU/L (range 247–832 IU/L) which is 1.9 x upper limit of normal (ULN) as per our reference ULN of 130 IU/L.

Conclusions In patients with PSC, using transient elastography cut offs suggested previously may overestimate the presence of advanced fibrosis. This is more likely in patients with a raised ALP of > 1.9 x ULN. The single false negative result seen in our cohort is likely due to patchy nature of fibrotic disease in this cohort and again warrants caution when interpreting liver stiffness results.

REFERENCE

1. Ehlken H, Wroblewski R, Corpechot C, et al. Validation of Transient Elastography and Comparison with Spleen Length Measurement for Staging of Fibrosis and Clinical Prognosis in Primary Sclerosing Cholangitis. PLoS One 2016;**11**:e0164224

| P208 | SUSTAINED VIROLOGIC RESPONSE IS ASSOCIATED WITH AN IMPROVED QUALITY OF LIFE IN HEPATITIS C PATIENTS |

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Introduction Cirrhosis and chronic infection with Hepatitis C Virus (HCV) is associated with fatigue, depression and neuro-cognitive deficits which profoundly affect health-related quality of life (QoL). Advances in antiviral therapy mean ~95% of patients receiving treatment achieve sustained virologic response (SVR), reducing progression to cirrhosis. Whether these improved clinical outcomes translate to improvements in QoL has not been empirically assessed. Therefore, this study examined the relationship between the presence of viraemia, fibrosis status and comorbidities on QoL in patients with HCV.

Methods Patients with HCV were recruited prospectively from viral hepatitis clinics at the Freeman Hospital, Newcastle upon Tyne. Data regarding patient's virus status, fibrosis status, co-morbidities, and lifestyle behaviours were obtained, alongside QoL using a validated question (the Hepatitis Quality of Life Questionnaire; HQLQv2). In all domains of the questionnaire higher scores imply a better QoL.

Results 100 patients were recruited (67% male, 93% white, median age 52 years, median BMI 28.6 kg/m^2), of which