

Background Non-alcoholic fatty liver disease (NAFLD) is an emerging health problem, that can progress to non-alcoholic steatohepatitis (NASH) and cirrhosis with associated liver morbidity and mortality. The prevalence of NAFLD is estimated at 25%, with 2–3% of having NASH. It is linked with metabolic conditions, including poor diet and lifestyle changes are crucial in managing this condition. The bountiful supply of biscuits on NHS work areas means that staffs are exposed to poor diet at work. We conducted a study of the prevalence of NAFLD using Fibrosan (530, Compact, Echosense) in NHS staff in a district general hospital.

Methods Data was collected at a Staff Wellness Programme from 2018 to 2020 where Fibrosan was performed. Patients were defined to have NAFLD if they had Controlled Attenuation Parameter (CAP) above 248dB/m. They were defined to have significant fibrosis if Liver Stiffness Measure (LSM) above 7.8 kilopascals (kPa). They were given leaflet with dietary and lifestyle advice and invited for repeat scanning at a later date. The use of CAP in detecting mild hepatic steatosis has a reported sensitivity of 87% and specificity of 91%

Results A total of 74 staff (management and clinical) participated in the programme, 60 female and 14 male. Mean age 46.9 (range 25 to 70).

59.4% (n=44) had NAFLD with CAP >248 dB/m with 16.2% (n=12) also having associated fibrosis with LSM >7.8 kPa

15 patients who were identified as having NAFLD were re-scanned (mean 10.7 months) following advice on lifestyle changes. 80% (n= 12) had significant improvement in the CAP score with a mean reduction of 56.3dB/m (range 4–135). 20% (n=3) of patients whose CAP did not improve reported that their lifestyle had not changed much.

Our data showed a baseline pre-intervention CAP 308.4 dB/m and LSM 6.5 kPa. Following intervention, this improved to CAP 268.9 dB/m and LSM 4.7 kPa. Most mentioned the easy understanding of Fibrosan, and being given a number representative of the liver fat may act as a ‘shock factor’ in motivating them for lifestyle change.

Conclusion Although the numbers are small, this study suggests a higher prevalence of NAFLD in a district general hospital in comparison to the general populations (59.4% vs 25%). This study is limited by the non-random selection nature of our study populations, as people who signed up for Wellness Programme may have had a concern with their general health. However, it also showed a significant reduction in

CAP and LSM score post-intervention, with simple lifestyle advice in a group of motivated healthcare workers. Most mentioned ‘Fibrosan with a number representative of the liver fat’, acts as a shock factor in motivating them for lifestyle changes. Fibrosan is a quick and easy tool, and in the right context, it can be used as a primary screening tool for NAFLD in the future.

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HOW DEPRIVATION INFLUENCES THE INCIDENCE AND SURVIVAL OF HCC PATIENTS IN THE WEST OF SCOTLAND

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Introduction Hepatocellular carcinoma (HCC) is rising in incidence both in Scotland and the UK.¹ This study set out to examine whether there is an association between deprivation and the incidence of HCC and survival following diagnosis in the West of Scotland.

Methods Data was collected on patients from the prospectively collected West of Scotland regional HCC database from November 2014 to August 2017. Patients were included if they had a new diagnosis of HCC not previously diagnosed or treated elsewhere. Data on deprivation was taken from the Scottish Index of Multiple Deprivation (SIMD) 2016

Data was collected on Excel and the statistical analysis was performed using R. Chi squared, unpaired t-test and log rank tests were used as appropriate. Incidence rates were age adjusted using the European standard population.

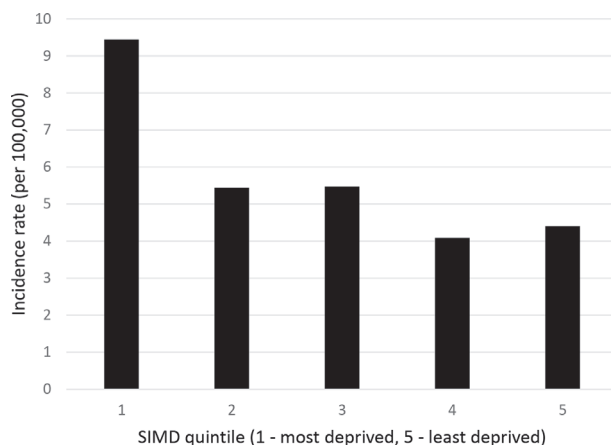
Results 357 patients were included in the study. 45% of all new cases of HCC were in patients living in the most deprived 20% postcodes. There was a higher incidence rate in patients in SIMD quintile 1 (most deprived) compared with quintile 5 (least deprived) (10.3 vs 5.5 per 100,000, respectively, $p < 0.0002$; figure 1). This higher incidence was consistent in both men and women.

Patients in SIMD quintile 1 were younger compared with those in SIMD quintile 5, with a mean age 65.4 yrs vs 69.5 yrs respectively, $p = 0.027$.

A significantly higher proportion of people in SIMD quintile 1 had HCV as the aetiology of their cirrhosis compared with SIMD quintile 5 (30% vs 7%, respectively, $p = 0.01$). There was no significant difference in patients with alcohol as the aetiology between SIMD quintile 1 and 5 (48% vs 50%, respectively, $p = 0.6$).

Following diagnosis there was no significant difference in survival between patients in the most deprived and least deprived quintiles (median survival 368 days vs 325 days, $p = 0.8$). The only predictors of survival after diagnosis of HCC were BCLC stage ($p < 0.0001$), Child Pugh score ($p < 0.0001$) and age ($p < 0.005$)

Conclusions In contrast to previous studies, we found a higher incidence of HCC in both men and women living in the most deprived areas.¹ The proportion of HCC patients with HCV (but not alcohol) as the aetiology of cirrhosis was higher in the most deprived compared with least deprived quintile. Following diagnosis of HCC, we found no difference in survival between patients living in the most and least deprived areas.



Abstract P180 Figure 1

REFERENCE

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Age adjusted incidence ratesSave

P181 REFRACTORY ASCITES –LONG TERM SURVIVAL IS NOT IMPROVED WITH COVERED TIPSS: A SINGLE CENTRE EXPERIENCE

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Introduction Refractory ascites is a serious complication of cirrhosis and portal hypertension with a 1 year survival rate of 50%. TIPSS (transjugular intrahepatic portosystemic shunt) is a treatment option in selected patients with refractory ascites.¹

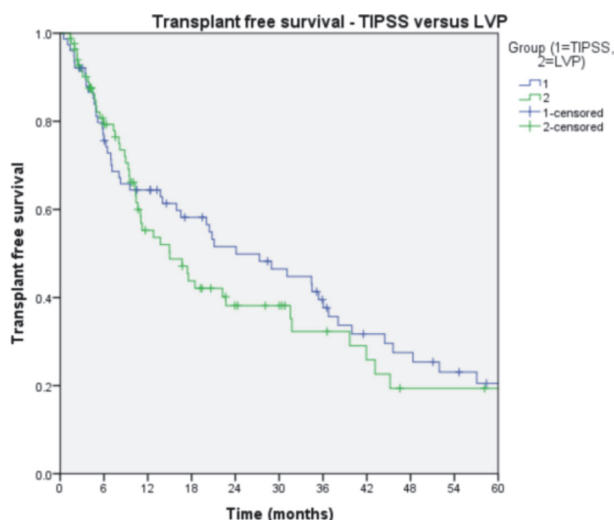
The aim of this project was to assess the outcomes of patients who underwent a covered TIPSS to those who had large volume paracentesis (LVP).

Methods We performed a retrospective study of all patients who underwent a covered TIPSS for refractory ascites during April 2010 to November 2017. This was compared to all patients who underwent LVP (mean 1.28±0.55 paracenteses per month) during a similar time period. Biochemical and clinical parameters were compared. The primary outcome was transplant free survival.

Results The sample size in each group was n=76 in TIPSS group, n=86 in LVP group, giving a ratio of 1:1.1.

The mean ages were 59±9.5 & 61±11.4 years. There was a male predominance of 53% and 60% respectively in the TIPSS and LVP group. Alcohol related liver disease was the most prevalent aetiology (75% TIPSS group; 56% LVP group).

The MELD score was significantly higher in the LVP group (11.5±3.8 vs 15.6±5.2, p<0.05). 26 patients in the LVP group underwent liver transplantation vs 10 patients in the TIPSS group. There was no difference in SBP presence between groups. Overall follow up was 20±20.6 months.



Abstract P181 Figure 1 Transplant free survival (KP curve)

Transplant free survival time at 6,12,24,60 months is as follows: TIPSS: 76%, 64%, 50%, 21%; LVP group 79%, 55%, 38%, 19% (p=NS, figure 1). No clinical or biochemical variables were associated with survival on cox regressions analysis.

A subset of patients in the LVP group (n=48) who would be considered suitable for TIPSS based on the following parameters (platelet count $\geq 75 \times 10^9/L$, bilirubin ≤ 50 micromol/L, absence of pre-exist hepatic encephalopathy(2)) was compared with the TIPSS group (n=76). Further analysis showed transplant free survival remained similar in both groups.

Conclusions Our study shows that, in a real-world cohort of advanced liver failure patients, covered TIPSS did not result in improved transplant free survival compared to LVP. Therefore, liver transplantation remains the best option for refractory ascites in selected patients. Further controlled studies are required, to identify prognostic markers to assist in selecting appropriate candidates for TIPSS.

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P182 QUALITY OF LIFE IN PATIENTS WITH AUTOIMMUNE HEPATITIS: A REVIEW OF PATIENT-REPORTED OUTCOME MEASURES

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Introduction Patient-Reported Outcome Measures (PROMs) have been used to assess quality of life (QoL) in Autoimmune Hepatitis (AIH). We aimed to identify which components of QoL have been assessed and which, if any, are impaired in AIH.

Methods Systematic search of Medline, EMBASE and PsycINFO (inception to January 2020). We included studies measuring QoL in adults (>16 years) with AIH. Studies without AIH-specific data or on transplanted patients were excluded. A pooled analysis was performed of studies using the Short Form (SF)-36 PROM, which has 8 subscales (0–100): Physical Functioning (PF), Role (physical) Functioning (RF), Bodily Pain (BP), General Health (GH), Vitality (VT), Social Functioning (SF), Role Emotion (RE), Mental Health (MH). We calculated physical and mental component summary scores (PCS and MCS) using a formula to aggregate individual subscales.

Results Of 1153 studies assessed, 14 met inclusion criteria. 10 PROMs were identified: 2 liver disease-specific: Chronic Liver Disease Questionnaire (CLDQ) and Liver Disease Symptom Index (LDSI-2.0); 2 generic: SF-36 (or the derived SF-12) and EuroQol (EQ)-5D-5L; 4 mental health specific: Hospital Anxiety and Depression Scale (HADS), Patient Health Questionnaire (PHQ)-9, General Anxiety Disorder (GAD)-7 and State Trait Anxiety Index (STAI); and 2 fatigue-specific: Fatigue Impact Scale (FIS) (or its modification, MFIS) and Multidimensional Fatigue Index (MFI)-20.