

PTH-097 **NAFLD: CASE-FINDING IN DIABETIC PATIENTS FROM PRIMARY CARE USING FIB4 SCORE**

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Introduction In contrast to European guidelines, recent NICE and BSG guidelines state that further evidence is required to establish the cost-effectiveness of case-finding for non-alcoholic fatty liver disease (NAFLD) in high risk groups such as type 2 diabetics (T2DM) before it can be recommended. We present initial Results of a pilot of case-finding for NAFLD in T2DM patients in a GP practice in the North East of England using Fib4 scores, in order to assess the likely cost implications of such screening in the community.

Methods 76 successive patients attending their GP practice for routine diabetic review had a Fib4 score calculated. Those who had Fib4 score above defined age-related cut offs (1.35 for <65 year olds, >2.00 for 65–80 year olds and >3.25 in over 80 year olds) were referred to secondary care for further evaluation (including fibroscan or liver biopsy). We looked at referral rates in order to extrapolate the number of likely referrals to secondary care and cost implications if this approach was rolled out across the local area.

Results 76 successive patients were screened with Fib4 scores at diabetic review. 18 (23%) were female and 58 (77%) male, age 31–93 (mean age 64 yo) with a mean BMI of 31.08. Alcohol consumption ranged from 0–40 units with a mean of 5.4 units per week. Of 76 patients, 10 (13.15%) were found to have scores above the age related cut-off (mean age 69.8). None of these had previously been referred to secondary care. Of these, 8/10 (80%) had an ALT within 'normal' range and 4 (40%) had an ALT of <20, 4/10 (40%) were thrombocytopenic (plt <150) and 8/10 (80%) had plt count <200. 6 of the 8 (75%) patients with raised ALT (>40) in the cohort had a Fib4 score below the age related cut-off. 5 were unsuitable for referral because of significant co-morbidities or inability to consent. 5/76 (6.57%) were referred to secondary care for consideration of Fibroscan/liver biopsy.

Conclusions This initial pilot confirms that abnormal liver function tests do not correlate well with fibrosis scores, and diagnosis of NAFLD based on abnormal liver function tests are likely to miss patients with advanced fibrosis. Based on this initial pilot, the referral rate for Type 2 diabetics following Fib4 screening would be 6.57%. In our local area, with an estimated 10 000 patients with T2DM, this would generate an estimated 657 referrals. These patients would require ultrasound scans, secondary liver screens and fibroscan and/or liver biopsy to stage disease, and there would then be additional costs associated with surveillance of patients who are found to have advanced fibrosis or cirrhosis. The next step is to assess the patients referred via the pathway with Fibroscan/liver biopsy, to determine the proportion with advanced liver disease.

PTH-098 **CAN BAVENO-VI CRITERIA FOR VARICES SCREENING SAFELY REDUCE ENDOSCOPY WORKLOAD IN A REGIONAL LIVER UNIT?**

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Introduction Oesophageal varices (OV) are a common sequelae of liver cirrhosis often leading to significant morbidity and mortality. Traditionally, patients with liver cirrhosis have undergone variceal surveillance by means of oesophago-gastroduodenoscopy (OGD). The Baveno VI guidance proposes that those with a platelet count of greater than $150 \times 10^9/L$ and transient elastography (Fibroscan) reading of <20 kPa have a very low risk of having OV requiring treatment and can subsequently avoid screening OGD. We sought to apply these criteria to the annual screening workload of a regional liver unit to assess what proportion of screening OGDs could be safely avoided.

Methods A retrospective analysis was carried out of all OGDs performed for assessment of oesophageal or gastric varices by the hepatology department in a 12 month period (2016) in the Regional Liver Unit, Royal Victoria Hospital, Belfast. Data was retrieved from the endoscopy unit database (Unisoft) and patient information was obtained using the regional Electronic Care Record. Exclusion criteria included pre-hepatic or pre-sinusoidal portal hypertension (n=14), previous banding or glue therapy (n=166), TIPS (n=6), emergency endoscopy for acute bleeds (n=51) and Childs C liver disease (n=7). Transient elastography (TE) and platelet count (performed within a year of endoscopy) were assessed alongside OGD Result.

Results Of the 509 OGDs carried out in 2016, 244 were excluded due to the above criteria, leaving 265 who had OGD for varices screening. 183 (69%) of the 265 screened patients had not undergone TE due to being diagnosed with cirrhosis radiologically or histologically. This left 82 valid subjects who could be assessed by Baveno VI criteria. 24 (29%) of the valid subjects fulfilled the Baveno VI criteria to avoid screening, 20 of whom had no OV whilst the remaining 4 had 1 column of 'barely noticeable' or 'possible' OV. None of the patients required a therapeutic intervention. 59 subjects had either platelet count of <150 or TE scores of >20 kPa and therefore, by Baveno VI guidance should undergo screening endoscopy. Of these, 35 did not have OV and 24 (40.1%) had OV including 11 who required a drug intervention with beta blocker.

Conclusions At least 10% (24 of 244) of those undergoing OGD screening for varices in a regional liver unit could safely avoid OGD if Baveno VI criteria were applied. This number could be significantly higher if TE was used to assess every patient before screening OGD – 69% of those who had screening OGD in our unit did not have TE and therefore could not have Baveno VI criteria applied.

PTH-099 **THE PREDICTIVE VALIDITY OF INDICES OF FUNCTIONAL DECLINE IN DETERMINING OUTCOME FOLLOWING LIVER TRANSPLANTATION**

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Introduction Disease severity, disease aetiology and nutritional status are important determinants of outcome in patients with cirrhosis. Functional decline, reflected by health-related quality of life (HRQOL), mental health, and degrees of disability and frailty may also play an important role. However, it is unclear whether these factors influence outcome after liver transplantation. This study aimed to assess the predictive validity of