were 64.4 ± 11.9 years and 75.9 ± 15.4 kg respectively. The mean blood results for haemoglobin, platelets, bilirubin, ALP, alanine aminotransferase, and creatinine were 126.8 ± 15.0 g/L, 254.5 ± 94.3 x10^9/L, 9.4 ± 4.3 μmol/L, 144.4 ± 75.6 u/L, 30.3 ± 19.3 u/L, and 75.1 ± 28.3 μmol/L respectively. The mean UDCA dose for the cohort was 13.9 ± 5.9 mg/kg/day. Biochemical failure was documented in 13 patients who had an ALP of greater than 1.67 times the ULN at the end of 1 year of therapy with UDCA (13.5%). Of these 13 patients, 4 were found to be on suboptimal dosage of UDCA (<10 mg/kg/day), leading to a true non-response rate in 9/96 subjects (9.4%).

Conclusions A substantial proportion of PBC patients were found to be biochemically unresponsive to UDCA. Shifting these patients to OCA would lead to significant drug expenditure for NHS Grampian. An intermediary step of shifting non-responsive patients to the cheaper drug, Bezafribrate, may prove to be cost-effective, but this drug has been revealed to have no benefit in a recent Cochrane review2.

REFERENCES

PTU-035  SCREENING OF TYPE II DIABETIC PATIENTS FOR LIVER FIBROSIS WITH FIBROSCAN IN PRIMARY CARE

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Introduction In 2016, European Association for the Study of the Liver (EASL) recommended the presence of non-alcoholic fatty liver disease (NAFLD) should be looked for in Type II diabetic patients as they are at high risk to develop liver fibrosis. Our prospective cohort study aims to examine the practicality of screening Type II diabetic patients for liver fibrosis and to compare different liver fibrosis scores.

Methods For a 10 weeks period, a hepatology specialist nurse from Aberdeen Royal Infirmary attended the Type II Diabetic Clinic at 3 general practices. Unselected patients at the clinics were given information leaflets before consenting for Fibroscan and blood testing. Different liver fibrosis scores including NAFLD fibrosis, Fibrosis-4 (FIB-4) and AST to Platelet Ratio Index (APRI) scores were calculated on the day of Fibroscan. Clinically significant fibrosis (≥F2) was defined as liver stiffness measurement (LSM) > 7 kPa and advanced liver fibrosis/cirrhosis (F3 and F4) was defined as LSM > 12 kPa. Patients with LSM > 7 kPa were given lifestyle modification advices including diet, exercise and alcohol intake. Full ‘liver screen’ was performed for these patients and they were seen in the hepatology clinic with follow-up Fibroscan.

Results 49 patients (mean age: 67.6 ±12.2, mean BMI: 30.5 ±6.4 and male: 55%) were recruited in the study after excluding 4 patients due to excess alcohol intake (n=1), known liver cirrhosis (n=1) and body habitus (n=2), 22/49 (45%) patients had LSM >7 kPa. 12/14 (86%) patients who had follow-up fibroscan had decreased LSM. 37/40 (93%) patients had a score ≥1.455 which indicated indeterminate/advanced fibrosis scores based on previous studies. In our study, all liver fibrosis scores performed poorly at diagnosing clinically significant fibrosis (>7 kPa): NAFLD score (AUROC=0.57), APRI score (AUROC=0.52) and FIB-4 score (AUROC=0.42). NAFLD score (AUROC=0.81) had the best diagnostic accuracy for advanced fibrosis (>12 kPa) compared to APRI score (AUROC=0.76) and FIB-4 score (AUROC=0.73).

The best NAFLD Cut-off score for advanced fibrosis was ≥0.302 with a sensitivity of 100% and specificity of 54%.

Conclusions In this small cohort study, there was a high prevalence of indeterminate/advanced NAFLD fibrosis scores in unselected type II diabetic patients. This strategy could lead to significant number of hepatology referrals to hospitals if used as a screening test. The NAFLD score was the best performing panel for advanced fibrosis in this cohort. Lifestyle modification advice given by the hepatology specialist nurse led to significant improvement in patients’ repeat liver stiffness measurements.

PTU-037  FONTAN ASSOCIATED LIVER DISEASE – EARLY EXPERIENCE AND INSIGHTS FROM LIVER SCREENING

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Introduction There is growing recognition of Fontan-associated liver disease (FALD), which encompasses a spectrum ranging from liver congestion to cirrhosis and hepatocellular carcinoma. Diagnostic pathways remain poorly defined, with no consensus on optimal screening and management modalities. Aim of this study was to assess prevalence and severity of FALD by implementation of a structured screening programme.

Methods A cohort of 93 Fontan patients aged ≥16 years underwent a screening protocol for liver disease at our tertiary Adult Congenital Heart Disease Centre, including blood tests, liver ultrasound with elastography, and fibroscan. Results were discussed in a MDM and patients categorised according to the risk of having liver fibrosis. MRI, CT scan and/or endoscopy were also organised when appropriate. Patients were followed up yearly if the initial tests were reassuring, or started on 6-monthly HCC surveillance if the initial screening suggested advanced fibrosis.

Results The study cohort comprised 55 (59%) males, mean age 25.4±6.2 years, and median 18 years since Fontan surgery. Most patients were asymptomatic (79%), with good haemodynamics. Liver abnormalities on ultrasonography were evident in 51% (41 of 80 scans), including coarse echotexture (41%), hepatomegaly (12%), hyper-echoic nodules (6%) and signs of portal hypertension (13%). Liver stiffness was elevated on both ultrasonic elastography (mean 7.8±3.3 kPa, Philips US ElasPQ) and Fibroscan (median 20.0±6.7 kPa). Liver MRIs and triple phase liver CDs, performed in a subset of the cohort, further characterised liver abnormalities, most notably focal nodular hyperplasia (FNH) in 65% (13 of 20 MRIs).