

for up to 1 weeks. Live-dead assay confirms cell viability with retention of metabolic activity and morphology at 1 week. Cells also have increased in number from 0.12% live cells on day 1 to 0.45% on day 7 ($P < 0.0001$).

Discussion HIFU has been used in treating benign and cancerous lesion has shown promising results. However, a particular modality of HIFU, boiling histotripsy, can be used to increase the yield of adult hepatocytes extraction & isolation safely. Here we report a detergent and chemical-free cell harvest technique. It can improve the quality and number of cells for transplantation. Further studies are required to assess long term effect extracted cells.

P191 USE OF A DECOMPENSATED CIRRHOSIS DISCHARGE CARE BUNDLE IMPROVES OUTCOMES IN PATIENT CARE

^{1,2}J Gallacher*, ¹T Majiyagbe, ¹L Jopson, ¹A Johnson, ¹P Coleman, ^{1,2}S McPherson. ¹Liver Unit, Newcastle Upon Tyne Hospitals NHS Foundation Trust; ²Newcastle University

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Introduction Hospital readmissions are common following discharge of patients with decompensated cirrhosis (DC). In order to try and improve the quality of patient discharge and reduce readmissions we developed a decompensated cirrhosis discharge bundle (DCDB) and patient self-management toolkit. The DCDB included a checklist to ensure important aspects of care were addressed and care plans were communicated to the patient and GP. The patient toolkit included information about cirrhosis and advice to help patients 'self-manage' complications. Our aim was to assess the impact of the DCDB and toolkit on patient care.

Method Baseline (pre-bundle) patient data was collected at discharge on 3 Gastro/Liver wards from Jan-Dec 2017. A pilot of the DCDB was conducted from Nov 2018-Oct 2019 on the same wards. Medical records of patients discharged with DC were reviewed to assess care plans. Potentially preventable

readmissions were those where better discharge planning could have avoided the admission e.g. emergency admission for paracentesis.

Results 147 patients were included (62% male; median age 56, [31–87]; median admission 10 days [1–103]). 73% had alcohol-related cirrhosis. Ascites was the most common presentation (41%). The table 1 shows a comparison of patient management pre-DCDB and post implementation with and without a DCDB.

Conclusion Overall usage of the DCDB improved some aspects of care, particularly management of alcohol misuse and documentation/monitoring of renal function post-discharge. Management of HE and variceal bleeding were reasonably good before the DCDB so no real change was seen in these. Completion rates for the bundle were disappointingly low. With the introduction of an electronic patient record in our Trust we plan to make completion of the bundle mandatory to improve completion rates.

P192 FEASIBILITY OF A VERY-LOW-CALORIE DIET TO ACHIEVE 10% WEIGHT LOSS IN PATIENTS WITH ADVANCED NAFLD

¹Jadine Scragg, ²Leah Avery, ¹Sophie Cassidy, ^{3,4}Laura Haigh, ^{3,4}Marie Boyle, ^{3,4}Quentin M Anstee, ^{3,4}Stuart McPherson, ^{1,3,4}Kate Hallsworth*. ¹Population Health Sciences Institute, Newcastle University, Newcastle Upon Tyne, UK; ²School of Health and Life Sciences, Teesside University, Tees Valley, UK; ³Institute of Clinical and Translational Research, Newcastle Upon Tyne, UK; ⁴The Liver Unit, The Newcastle Upon Tyne Hospitals NHS Foundation Trust, Newcastle Upon Tyne, UK

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Background and Aims Non-alcoholic fatty liver disease (NAFLD) is the most common liver condition worldwide and is directly linked to chronic excess calorie consumption, lack of physical activity and overweight/obesity. In the absence of approved drugs, lifestyle modification promoting weight loss, is the primary recommended therapy for NAFLD. A weight loss goal of 10% has been recommended for patients with NAFLD as this has been shown to improve liver fat, inflammation and fibrosis. However, only 10–20% of patients achieve this level of weight reduction with standard dietary approaches. This pilot study aimed to determine whether an 8–12 week very low calorie diet (VLCD) is an acceptable therapy to achieve a target weight loss of 10% in patients with advanced NAFLD.

Method 30 patients with advanced NAFLD were recruited to an 8–12 week VLCD (~800 kcal/day) using meal replacement products (Optifast, Nestlé Health Science). Anthropometrics, blood tests (liver enzymes, lipid profile, glucose, HbA1c, insulin), liver stiffness and cardiovascular disease risk were measured at baseline and after the VLCD intervention.

Results Of the 45 patients approached to take part in this study, 30 consented to enrol. This study was fully recruited at a single site within 6 months and 27/30 retained post VLCD.

68% of patients reached the weight loss target of 10%; mean weight loss was 13 kg.

Weight loss through an 8–12 week VLCD significantly improved liver health (liver enzymes and liver stiffness), cardiovascular disease risk (blood pressure and QRISK2) and metabolic health (fasting glucose, HbA1c and insulin). BMI and body composition also improved (See table 1).

Conclusion A VLCD is a feasible way of achieving 10% weight loss in patients with advanced NAFLD. Patients were

Abstract P191 Table 1

	Pre-	Post-DCDB implementation		
	bundle	Total	Completed	Not completed
Total (n)	61	86	23	63
Alcohol misuse	59% (36)	72% (62)	91% (21)	(65%) (41)
Alcohol team review	64% (23)	71% (44)	81% (17/21)	66% (27/41)
Thiamine prescribed	94% (34)	84% (52)	90% (19/21)	80% (33/41)
Community alcohol plan	39% (14)	44% (27)	62% (13/21)	34% (14/41)
HE related admission	49% (30)	37% (32)	30% (7)	40% (25)
Lactulose prescribed	93% (28)	88% (28)	86% (6/7)	88% (22/25)
Rifaximin prescribed	90% (27)	80% (26)	86% (6/7)	80% (20/25)
Ascites present	74% (45)	67% (58)	70% (16)	67% (42)
Discharge creatinine documented	2% (1)	17% (10)	44% (7/16)	7% (3/42)
Plan for U&Es check after discharge	24% (11)	50% (29)	54% (9/16)	48% (20/42)
Variceal bleed	8% (5)	13% (11)	9% (2)	14% (9)
Beta-blockers, repeat OGD planned or TIPSS	100% (5)	82% (9)	100% (2/2)	78% (7/9)
Readmissions within 30 days	30% (18)	26% (22)	35% (8)	22% (14)
Potentially preventable liver related 30 day readmission	39% (7)	18% (4)	12% (1/8)	21% (3/14)

Abstract P192 Table 1

Subject Characteristics	Baseline (n=30)	Post-VLCD (n=27)	P-Value
Age (years)	56 ± 12		
Sex (n) male/female	18/12		
Time since NAFLD Diagnosis (months):	28.4 ± 31.7 13.5 (1–113)		
Mean			
Median (range)			
Anthropometry			
Weight (kg)	119 ± 25	104 ± 21	0.000**
BMI (kg/m ²)	42 ± 8	37 ± 8	0.000**
Body fat (%)	45 ± 6.9	40 ± 9.1	0.001**
Blood pressure: Systolic (mmHg)	144 ± 15	133 ± 14	0.003**
Diastolic (mmHg)	86 ± 11	81 ± 9	0.018*
Blood samples			
Total cholesterol (mmol/L)	4.3 ± 0.9	4.3 ± 1.1	0.652
Triglycerides (mmol/L)	2.1 ± 1.8	2.0 ± 1.4	0.156
HDL (mmol/L)	1.2 ± 0.3	1.6 ± 1.9	0.270
AST (IU/L)	35 ± 18	25 ± 9	0.004**
ALT (IU/L)	47 ± 30	31 ± 16	0.003**
GGT (IU/L)	82 ± 74	52 ± 72	0.000**
Fasting glucose (mmol/L)	7.5 ± 2.3	6.1 ± 1.1	0.002**
Hba1c (mmol/mol)	50 ± 13	42 ± 9	0.000**
Insulin (pmol/L)	135 ± 85	92 ± 91	0.018*
Fibroscan			
Stiffness (KPa)	13.0 ± 6.6	8.0 ± 2.9	0.022*
IQR (KPa)	3.5 ± 3.0	2.5 ± 2.8	0.183
Non-invasive scores			
FIB-4	1.5 ± 1.0	1.2 ± 0.7	0.206
QRISK2	15.6 ± 14.2	11.9 ± 9.8	0.030*

Values are means (SD).

*significant difference Baseline vs. Post-VLCD ($p < 0.05$); **significant difference ($p < 0.01$)

willing to undertake the strict dietary intervention and significant improvements in liver, metabolic and cardiac health were observed.

P193 PATIENTS WITH HEPATITIS C ARE AT HIGH RISK OF CARDIOVASCULAR EVENTS

¹Sarah Hogg*, ¹Shion Gosrani, ¹Rachael Forbes, ^{1,2}Kate Hallsworth, ³Matthew D Campbell, ^{1,2}Stuart McPherson. ¹Newcastle Upon Tyne Hospitals, Newcastle Upon Tyne, UK; ²Translational and Clinical Research Institute, Newcastle University, UK; ³School of Food Science and Nutrition, University of Leeds, UK

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Background Chronic hepatitis C virus infection (CHC) is a risk factor for cardiovascular (CV) disease. Despite this, many clinicians focus on managing the hepatic complications of CHC and CV risk factors may not be assessed. Our aim was to examine the prevalence of CV risk factors in a cohort of CHC patients to determine the proportion of individuals at high risk of CV events and whether this risk was actively managed.

Methods Patients with CHC (untreated or cured) were recruited prospectively from viral hepatitis clinics. Data was collected on CV risk factors, lifestyle behaviours,

anthropometry, and body composition. QRISK3, a validated tool to predict 10-year risk of CV events, was calculated.

Results 100 patients were recruited (67% male, 93% white, median age 52 years [range 24–80], 71% treated HCV, 34% advanced fibrosis/cirrhosis). Overall, the mean BMI was 28±6 kg/m², 14% had type 2 diabetes, 61% had hypertension and 30% had the metabolic syndrome (ATPIII criteria). The median fat mass was 29% [7–45] for males and 39% [12–54] for females. 79% had a history of smoking and 52% were current smokers (UK average 15%). 9% of patients had diagnosed CV disease. Overall, the median 10-year CV event risk was 8.3% (0.3–63%). 45% had a predicted 10-year CV event risk of >10%, of which all were aged over 45 years. Despite presenting with a CV event risk indicative of statin treatment, only 10% of these individuals were treated with lipid lowering drugs and 27% treated with antihypertensives. Overall, 92% had a predicted ‘heart age’ greater than their actual age (median difference +7 [-4 to +26] years). There was no significant difference between predicted ‘heart age’ and actual age for treated CHC and those with active CHC ($p=0.92$)

Conclusions A large proportion of individuals with CHC attending secondary care clinics have a high risk of CV events and present with a range of comorbidities. In order to improve the holistic management of these patients, regular assessment of CV risk should be undertaken, particularly in those over 45 years. CV risk factors (smoking, BP, dyslipidaemia and diabetes) should be actively managed.

P194 THE BURDEN OF HEPATITIS D INFECTION IN EAST LONDON

²Hein Htet*, ²Ahmed Albu-soda, ²Sami Hoque. ¹St Richard's Hospital, Chichester, UK; ²Whipps Cross University Hospital, London, UK

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Introduction Hepatitis D virus (HDV) only infects patients with pre-existing hepatitis B. It is commonly found in Eastern Europe, Middle East, Africa and South America. Barts Health NHS Trust is one of the largest NHS trust in the UK and consists mainly of The Royal London, St Bartholomew's, Whipps Cross, Newham and Mile End hospital. It serves 2.6 million population in a large part of cosmopolitan East London area where HDV could be more prevalent due to its mobile population. We conducted a retrospective study to evaluate the burden of hepatitis D in our trust with an aim to improve our service delivery and care.

Methods All patients who had positive hepatitis B surface antigen (HBsAg) and those who were tested for anti HDV serology (total IgG and IgM) were identified from Virology department database. Newly diagnosed hepatitis B patients were screened from the above data and matched with HDV results. Data were then collected from electronic health records.

Results Two thousand and one hundred eight cases were identified in the one-year period from 1st October 2017–30th September 2018. After removing duplicates, previous diagnosis and incomplete data, there are confirmed 927 new diagnosis of hepatitis B. Of them, only 328 (35%) had anti HDV serology performed. Of them, 20 (6.1%) are anti HDV serology positive. Out of these 20 cases, 5 (25%) have HDV DNA >640 copies/ml, i.e. PCR positive. Overall, only 5 of 328