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

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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

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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, Nestle 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
Patients with CHC are at high risk of cardiovascular (CV) events. Despite this, many clinicians focus on managing the hepatic complications of CVR and CV risk factors may not be assessed. Our aim was 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, dyslipidemia and diabetes) should be actively managed.

### 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

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### Abstracts

#### P192 Table 1

<table>
<thead>
<tr>
<th>Subject Characteristics</th>
<th>Baseline (n=30)</th>
<th>Post-VLCD (n=27)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>56 ± 12</td>
<td>54 ± 14</td>
<td>0.652</td>
</tr>
<tr>
<td>Sex (♂)</td>
<td>18/12</td>
<td>14/13</td>
<td>0.270</td>
</tr>
<tr>
<td>Time since NAFLD Diagnosis (months):</td>
<td>28.4 ± 31.7</td>
<td>28.2 ± 31.7</td>
<td>0.192</td>
</tr>
<tr>
<td>Mean</td>
<td>13.5 (7–113)</td>
<td>13.8 (7–113)</td>
<td>0.183</td>
</tr>
</tbody>
</table>

**Anthropometry**

- Weight (kg) 119 ± 25 104 ± 21 0.000**
- BMI (kg/m²) 42 ± 8 37 ± 6 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 ± 12 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)

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### P194 THE BURDEN OF HEPATITIS D INFECTION IN EAST LONDON


**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