Introduction Patients with end stage liver disease (ESLD) and/or hepato-cellular carcinoma (HCC) may be considered unsuitable for liver transplantation (LT) due to disease severity at presentation or de-listed due to disease progression. These patients have complex medical needs and a limited life expectancy and would be expected to benefit from access to palliative care services.
Methods We performed a retrospective audit of patients assessed for LT between 2010–12 at the Royal Free Hospital. We studied patients who were either not listed at the time of assessment, or listed and subsequently de-listed prior to LT. Sources used included transplant meeting records, hospital notes, local death records and palliative care database.
Results 106 patients were identified. Median age was 58 years (IQR 51–72) and 67% were male. The median MELD score at the time of assessment was 13 (IQR 11–18.75) with a UKELD score of 52 (IQR 49–57).

Aetiology of liver disease was divided into Alcohol related Liver Disease (39), Viral (32), Autoimmune (19), Metabolic (8), Cryptogenic cirrhosis (3), other (5).

Reasons for not listing included poor clinical state/co-morbidities (48), tumour outside transplant criteria (25), psychosocial/compliance issues (18) and currently too well for LT (15).

Excluding patients who were 'Too Well' for LT, Kaplan-Meier Survival analysis calculated the median survival following delisting as 219 days (IQR 28–540). Specifically for those delisted for 'poor clinical state' median survival was 29 days.

Overall, 17 (19%) patients were referred to palliative care a median 4 days before death (IQR 2.5–47.5).
Conclusion Those patients who are unfit for LT due to poor clinical state should be referred immediately for palliative care due to limited survival. Patients with HCC outside criteria have a significantly longer survival but still appear to have limited access to palliative care. Liver Transplant programs should have access to dedicated liver palliative care services.
Disclosure of Interest None Declared.

OC-035 LIFETOUCH®: A NOVEL REMOTE MONITORING DEVICE TO IDENTIFY PATIENTS WITH ADVANCED CIRRHOSIS MOST AT RISK OF DECOMPENSATION – A PROOF OF CONCEPT STUDY

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Introduction Hospital readmission from inter-current illness is common in advanced cirrhosis. Community monitoring of these patients with simple information-based technology may facilitate early problem recognition and intervention. Heart rate variability (HRV) has been deemed the 'gold standard' tool to characterise autonomic dysfunction, which is widely reported in cirrhosis, and remains independent of aetiology, and its severity has been shown to correlate with prognosis. However, the methods to study continuous measurement of HRV and studies in advanced cirrhosis are limited.
Aims This study used a wireless-monitoring technology, Lifetouch® system (Isansys), to assess changes of HRV remotely in acute-on-chronic liver failure (ACLF) patients, and evaluated the relationship to the severity of disease and inflammatory indices.
Methods Following ethical and local site approval, nineteen patients (13 male/6 female; mean age 52.5 ± 12.0 years) had HRV assessment following presentation to The Royal Free hospital, using the Lifetouch® system, with the standard deviation of the R-R interval (SDNN) used to collect changes in HRV. This novel system enabled continuous, wireless evaluation of HRV, which was compared with clinical, biochemical and inflammatory indices (IL-6, IL-8 and IL-10 measured by multiplex cytokine analysis).
Results HRV, as determined by SDNN, was significantly greater in cirrhosis patients with Child-Pugh scores <10 compared to >10 (31.26 ± 14.90 vs. 10.80 ± 5.61 ms). Similarly, UKELD correlated inversely with SDNN (R^2 = -0.46; $p < 0.01$). Spearman's rank analysis of SDNN in relation to the inflammatory indices: WCC, CRP, IL-6, IL-8 and IL-10 levels were -0.60 ($p = 0.01$), -0.56 ($p = 0.01$), -0.77 ($p = 0.02$), -0.86 ($p = 0.01$) and -0.79 ($p = 0.04$), respectively. Using a SDNN cut-off of ≤20 ms to signify patients with advanced disease (Child C), all inflammatory indices were shown to be significantly increased ($P < 0.01$).
Conclusion This pilot study provides proof of concept that remote monitoring showing reduced HRV, identifies patients with increased inflammation, more advanced liver disease and those most likely to present with acute decompensation of cirrhosis. Further study and refinement of this system may facilitate community monitoring of advanced liver disease patients, to provide 'alarm' signals that highlight acute decompensation and precipitate early intervention care pathways.
Disclosure of Interest None Declared.

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OC-036 NON-INVASIVE VENTILATION DURING PERCUTANEOUS ENDOSCOPIC GASTROSTOMY INSERTION IN MOTOR NEURONE DISEASE PATIENTS – A SAFE AND EFFECTIVE MULTI-DISCIPLINARY APPROACH

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Introduction Percutaneous endoscopic gastrostomy (PEG) is recommended for motor neurone disease patients with dysphagia and accelerated weight loss. However PEG has been suggested as inadvisable in the past in patients with impaired respiratory function. Recent small studies have found satisfactory outcomes using non invasive ventilation (NIV) to assist PEG placement in this setting. We set up a service performing this technique for our region, and analysed our outcomes.
Methods 26 patients with motor neurone disease were included in the study from Nov 2011 – Oct 2013; 11 (42%) were external referrals. Patients had respiratory assessment prior to the procedure including sniff nasal pressures, arterial CO_2 measurement, overnight oximetry and spirometry as directed by our respiratory physician. A modified oro-nasal mask with a endoscopic port was fitted prior to the procedure and NIV initiated and controlled by the respiratory physician. The PEG (Freka PEG, Bad Homburg, Germany) was inserted under continuous NIV which continued until the patient was fully awake in recovery. Prophylactic antibiotics were given routinely. Demographic and technical data, complications and survival were recorded.
Results Median age at time of PEG was 68 yrs (range 43–92), male 42%. Mean BMI was 22 (range 16–33). 3 patients (12%) were receiving NIV prior to referral. Mean dose of midazolam