(1.5%) who were tested for HDV serology had acute HDV co-infection.

Conclusion In our hepatitis B population, we estimate that there is a 6.1% seroprevalence rate of hepatitis D and 1.5% acute hepatitis D co-infection. There is also a room for improvement in hepatitis D screening within our trust and more study is needed to identify barriers in screening and robust public health measures may be needed to follow up this population.

**P195** RELATIVE ADRENAL INSUFFICIENCY AS A NOVEL PROGNOSTIC MARKER IN ADVANCED LIVER DISEASE AND REFRACTORY ASCITES

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Introduction Liver disease is a major cause of premature death in the United Kingdom. Septic shock is often the terminal event in cirrhotic patient. However even in non-septic cirrhotic patients there are cascade of physiological similarities to severe sepsis like hyperdynamic circulatory failure, low mean arterial pressure, increased cardiac output, elevated levels of proinflammatory cytokines.

Hypothalamus-pituitary-adrenal dysfunction leading to relative adrenal insufficiency (RAI) is a well-recognised phenomenon in septic shock, although in the context of liver disease it is poorly defined. Given these pathophysiological changes, we hypothesize that RAI has important role to play in refractory ascites.

Aim The aim of the study was to assess the prevalence of RAI in advanced liver disease and refractory ascites. We further explored the relevance of RAI as a prognostic tool to predict patients outcomes with advanced liver disease and diuretic intractable ascites.

Methods We prospectively undertook short synacthen test (SST) in patients with advanced liver disease presenting with ascites and hyponatremia. Delta cortisol levels was calculated as difference between baseline serum cortisol and serum cortisol after 60 min in response to intravenous administration of 250 μg corticotrophin (synacthen). We adopted the international task force criteria of random serum total cortisol of < 250 nmol/L or delta cortisol of < 250 nmol/L to define RAI. Patients with advanced liver disease were characterised to define the prevalence of RAI. Standard prognostic markers such as Child Pugh and MELD score were also analysed.

Results A total of twelve patients with advanced liver disease presenting with ascites and hyponatremia were studied. Mean delta cortisol level was 268.5 ±153.5. There was a significant variation in response to SST within the group. Using the international task force criteria a total of 9 patients (9/12, 75%) had RAI.

Overall, the 3 month mortality amongst these patients was very high (42% mortality, 5/12). Combined rate of mortality or enrolment to transplant waiting list was 67% (8/12).

There were 8 patients in the cohort with MELD score below 19 and five of these patients (63%) had RAI. We observed that 100% of the patients with RAI in this cohort died within 3 months of the test (3/5) or enrolled to transplant list (2/5) in contrast to only 33% (1/3) of patient without RAI. Out of the remainder 4 patients with MELD score >19, all four had RAI.

Conclusion For the first time we describe high prevalence of RAI in patients with advanced liver disease. RAI may well be a previously unidentified physiological phenomenon for development of refractory ascites. Preliminary data suggests that RAI is likely to be able to predict prognosis in such patients. Further larger studies aimed at validating RAI as a prognostic marker and role of corticosteroids in selective patients to help aid refractory ascites and its impact on overall mortality now need to be undertaken.

**P196** OPTIMIZING NUTRITION IN PATIENTS WITH CIRRHOSIS REDUCES HOSPITAL READMISSIONS IN MEDIUM AND HIGH RISK GROUPS

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Introduction Malnutrition adversely affects prognosis in cirrhosis and is often recognized late. All cirrhotic patients should be screened for malnutrition yet this is variably performed. We evaluated assessment and management of nutrition in cirrhosis by comparing local practice to EASL guidelines, and explored patient outcomes after a focused intervention.

Method Data was collected in 2 cycles. Cycle 1 retrospectively reviewed nutritional assessment of all patients admitted to gastroenterology during Sept.-Dec. 2018 with cirrhosis. An Inpatient Nutrition Proforma (INP) was introduced to record Child-Pugh (CP), anthropometrics, dietary intake, malnutrition risk and nutrition plan. Sarcopenia was assessed in high risk patients using handgrip strength (HGS). All CP-C and BMI <18.5 were high risk. Cycle 2 prospectively audited admissions after intervention (March-June 2019). Calorie-protein...