Gloucestershire outpatient departments. A spreadsheet with data-fields for postcode, diagnoses and SNOMED mappings within the BSG dataset was developed. Microsoft MapPoint® was used to examine the geographic distribution of the cohort with the intention of improving follow-up arrangements for patients in relation to the location of community hospitals.

Results From 236 patients studied to date, 100% of patients could be assigned a code from within the dataset. However, 32.2% had alternative/co-existing diagnoses that could also be legitimately coded. In order to be clinically useful the outpatient record should contain datafields for both aetiology (specific) and stage of liver disease (generic). For example, the MapPoint exercise provided an insightful distinction between requirements for a viral hepatitis or cirrhosis clinic in community hospitals.

Conclusion The BSG hepatology dataset satisfies the scoping requirements of HSCIC but a single diagnostic datafield entry is not immediately useful to clinicians, service providers or commissioners since treatment pathways in terms of aetiology and management pathways in terms of stage need not correlate.

Disclosure of Interest None Declared.

# PWE-138 SEPSIS INDUCED LIVER DYSFUNCTION: EARLY DIAGNOSTIC AND PROGNOSTIC MARKERS – THE SINGLETON EXPERIENCE

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**Introduction** To evaluate the incidence of liver dysfunction in septic patients and to determine the best available biomarker widely available as a diagnostic and prognostic marker of mortality.

Methods Adult inpatients (aged over 18) with positive blood cultures were identified from the microbiology database between Jan 2012 and June 2012. Total protein, albumin, bilirubin, ALP and ALT were recorded pre, peri and post sepsis. Peak derangement of liver function test (LFT) was evaluated. Hb, WCC, Plt and CRP were recorded on the date of positive blood culture. Patients fell into 3 groups; normal liver function, alcoholic liver disease and non-alcoholic liver disease. Kaplan Meier survivorship scores and ROC curves were calculated in SPSS<sup>R</sup>.

Results 93 of 140 patients with positive blood cultures had abnormal LFTs during admission. 71 medical case records were available for review. 41 patients had normal LFTs prior to admission, 30 had pre-existing liver disease with abnormal LFTs (8 ALD; 22 with malignancy). The median age of the cohort was 66.7 yrs (23–93) with an equal sex distribution (35 M:37 F). 47/71 patients had deranged LFTs prior to documented bacteraemia, 19/71 on the day of bacteraemia and 5/71 after.

Bilirubin was the most sensitive parameter of the LFT in predicting mortality prior to organism culture, calculated using ROC curves with an area of 0.59. Following positive blood culture, bilirubin, ALT and CRP rises are indicators of mortality with areas of 0.64, 0.55 and 0.55 respectively. The ROC curves were not statistically significant for Hb, WCC and platelets prior to, or after the onset of bacteraemia.

4 patients died within 24 h, 4 between 24–72 h and 7 between 72 h and 30 days. The overall mortality was 30% lower than a comparative study at 44.7% (median age 66.7). There was no statistically significant difference in mortality from sepsis

with pre-existing liver disease (alcoholic or malignant) compared to no existing liver disease.

Sepsis-induced liver dysfunction was present on admission in 66% of septic patients with previously normal LFT's, 27% prior to positive blood cultures and 5% after positive blood cultures. This is comparative to an incidence at admission of 58.3% in a recent study. The relative risk of mortality in the presence of sepsis induced liver injury was 1.82.

Conclusion Sepsis-induced liver dysfunction is common and clinically important to identify and has prognostic implications. Abnormal liver function can precede organism culture. There is currently no widely available gold standard test reflecting liver failure. Bilirubin is a diagnostic and prognostic marker of mortality before and after the onset of sepsis. ALT and CRP are useful after the onset of sepsis.

### REFERENCE

1 Kobashi et al. Sepsis associated liver injury:Incidence,classification and the clinical significance. Hepatology Research 2013;43:255–266

Disclosure of Interest None Declared.

# PWE-139 TACE IN THE MANAGEMENT OF HCC IN A REGIONAL CENTRE: 5 YEAR ANALYSIS AND ASSESSMENT OF PREDICTORS OF OUTCOME

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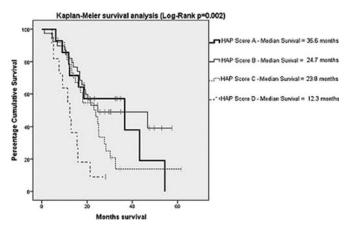
Introduction Transarterial chemoembolisation (TACE) is a useful treatment for selected patients unsuitable for surgical management of hepatocellular carcinoma (HCC). The Hepatoma Arterial-embolization Prognostic (HAP) score has been proposed to be a a better predictor of post-TACE outcome than the Child-Pugh or BCLC (Barcelona clinic liver cancer) scores.<sup>1</sup>

Methods Patients diagnosed with HCC from January 2008 until December 2012 were identified from a prospectively compiled regional MDT database. Patients were risk stratified by Child Pugh grade, BCLC and HAP scores. Response to treatment was assessed by the mRECIST criteria (modified response evaluation criteria in solid tumours).<sup>2</sup> Relationship between risk scores and outcomes were assessed using Log-Rank tests and median survivals.

Results 282 patients were diagnosed with HCC during the study period. 101 of these patients (81 male, 20 female) mean age 66.0 (SD 10.1 years, range 37 to 85) were treated locally with TACE. Aetiology was alcoholic liver disease in 30%, unknown in 21%, non alcoholic liver disease 15%, viral hepatitis 12%, haemochromatosis 8%, other and mixed aetiology 14%. Baseline Child-Pugh grades A, B and C were 76, 21 and 3% respectively. BCLC Staging was A, B, C and D in 25, 58, 13 and 4% respectively. HAP Scores A, B, C and D were 14, 39, 37 and 11% respectively.

A total of 228 TACE procedures were performed (mean 2.3 per patient; range 1–6). In 10 (10 %) of patients, TACE was used in combination with radiofrequency ablation and in two (2%) cases it was successfully used as a bridge to transplant. 88% of patients had TACE as sole therapy. Radiological follow-up post TACE was performed in 208 occasions with 18% having a mRECIST complete response, 43% a partial response, 26% static disease and 14% progressive disease.

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Abstract PWE-139 Figure 1

Analysis of the HCC risk stratification scores demonstrates the HAP Score predicted post-TACE survival (p = 0.002), but the Child Pugh (p = 0.192) and BCLC scores (p = 0.210) did not. There was a 3 fold increase in median survival in patients in the HAP A group when compared to those in the HAP D group (36.6 vs. 12.3 months).

Conclusion We report patient survival following TACE for treatment of HCC which compares favourably with published studies. The HAP score for TACE appears promising in our population and superior to existing scores.

### REFERENCE

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Disclosure of Interest None Declared.

## PWE-140 DEVELOPMENT AND VALIDATION OF THE NEWCASTLE PATIENT REPORTED ASCITES MEASURE

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Introduction Ascites is the most common complication of cirrhosis, but tools to assess its impact on Health Related Quality of Life (HRQoL) are limited. The Newcastle Patient Reported Ascites Measure (N-PRAM) was developed to measure the multidimensional impact of ascites on HRQoL.

Methods Structured interviews were carried out with patients with ascites and hepatologists and a long-list of twenty items was produced. These items were assessed for appropriateness and clarity by a further ten patients and the resulting tool was reduced to nine items. Initial validation was carried out on 25 patients with ascites from a multicentre UK study of quality of life in cirrhosis.

Results The 9 items tested the following areas: abdominal pain, abdominal discomfort, abdominal bloating, shortness of breath, movement, ill-fitting clothes, self-image, early satiety and ankle swelling.

Construct validity: inter-item correlations were good (r > 0.6) except for the ankle swelling item. Internal consistency, tested using Cronbach's alpha coefficient (a), was 0.955 and improved to 0.958 after removing the ankle swelling item.

Concurrent validity: The correlation between the CLDQ--Abdominal Symptoms scale and each N- PRAM item score (r range -0.653 to -0.358) was low to moderate.

Conclusion The 8 item Newcastle Patient Reported Ascites Measure is an effective HRQoL measure which has been validated in English. It provides a more detailed assessment of HRQoL in ascites than other available tools, such as CLDQ, and would therefore be a suitable outcome measure for use in future studies of ascites management.

Disclosure of Interest None Declared.

PWE-141 A POSITIVE COMPLEMENT DEPENDENT CYTOTOXIC (CDC) CROSSMATCH DOES NOT IMPACT ON PATIENT SURVIVAL OR INCREASE THE RISK OF ACUTE CELLULAR REJECTION, OR BILIARY STRICTURES AFTER LIVER **TRANSPLANTATION** 

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Introduction The impact of donor specific antibodies on outcomes after liver transplantation remains controversial. We aimed to evaluate the impact of a positive lymphocyte complement dependent cytotoxic (CDC) crossmatch on patient survival and the incidence of complications following liver transplantation (LT).

Methods We analysed the outcomes for all patients undergoing LT in our centre over a 6 year period (January 2007-December 2012). All patients transplanted at our centre receive a retrospective CDC crossmatch. We examined the indication for transplantation, patient survival, complications (acute cellular rejection, biliary strictures, chronic ductopaenic rejection) and whether the complications correlated to the presence of a positive crossmatch pre- and post-treatment with dithiothreitol (DTT) for IgM/IgG or IgG antibodies.

Results There were 194 liver transplants performed in this period (60% male). A crossmatch was available for 186 patients. The median age of the recipients was 55 years (range 19-71 years). The primary indications for LT were alcoholic liver disease 31%, autoimmune liver disease 18%, hepatocellular carcinoma 11%, viral hepatitis 9%, vascular 7.5%, paracetamol toxicity 7.5%, NAFLD 5% and other 11%. There were 12 deaths (6.5%) in the time period studied. 76 patients had a positive crossmatch and of these 13 were IgG positive (i.e., positive post-DTT treatment). Patient survival did not correlate with the presence of an IgM or IgG positive crossmatch (Fisher's exact test, p = 1.000 for both).

Acute cellular rejection (ACR) requiring augmentation of immunosuppression occurred in 38 patients (20%). Neither a positive IgM crossmatch (Chi-square test, p = 0.094) or a positive IgG crossmatch (Fisher's exact test, p = 1.000) correlated with the incidence of ACR. Clinically significant biliary strictures occurred in 14 patients (7.5%). The presence of a positive crossmatch did not correlate with the incidence of strictures (Chi square test, p = 0.124 for IgM antibodies and Fisher's exact test, p = 1.000 for IgG antibodies). Only 1 patient developed chronic ductopaenic rejection in our cohort.

Conclusion The presence of antibodies to donor lymphocytes (detectable by the CDC crossmatch) does not affect patient

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