

# PTU-085 DECOMPENSATED ALCOHOLIC LIVER DISEASE (ALD): HIGH LONG-TERM MORTALITY DESPITE INITIAL SURVIVAL

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**Introduction** Whilst early management and outcome of decompensated ALD has been extensively studied, there are few published data on long-term outcome. We have previously (McFarlane, Gut 2006; 55:A2 and 55:A36) reported on early and 4-yr mortality in 249 patients (163 men, age (mean(range)) 50(27–77) yr) admitted consecutively to our unit between 1/4/1998 and 31/12/2005 with first presentation of decompensated ALD (Child grade B or C). Here we aimed to assess long-term mortality and its associations in this cohort.

**Methods** We reviewed available hospital records, and death certificates and contacted surviving patients and general practitioners to assess who had died, the causes of death and the patients' overall alcohol drinking behaviour subsequent to the index hospital episode (classified as: abstinent, continued drinking but reduced, and did not reduce).

**Results** 37 patients died during the index hospital episode, all because of liver disease. The other 212 patients (including one transplanted during the index episode) were followed up for 4.3 (0.03–13.0) years. Only one other patient was transplanted. 154 patients have subsequently died. Cause of death is known in 134 (87%) and was due to liver disease in 95 (71%) of these. Only 4 patients died of hepatocellular carcinoma. Overall 5- and 10- year total mortality rates were 52+(SEM)4% and 75+3% respectively; corresponding rates from causes known to be liver related were 41+5% and 51+4%. Patients who were abstinent (n = 52) had lower total and known liver-related mortality (61+9% and 20+6% after 10 yr) compared to those who continued but reduced (n = 105; 73+5% p = 0.122 and 53+6% p = 0.013) and to those who did not reduce (n = 53; 91+4% p < 0.001 and 71+7% p < 0.001). In Cox regression analysis, both total and known liver-related mortality were independent of age, gender and severity of liver dysfunction at index presentation (Child, MELD, Glasgow and Maddrey scores) but were strongly associated with subsequent drinking behaviour (both p < 0.001) and inversely associated with serum albumin at discharge following index hospital episode (p = 0.001 and 0.019).

**Conclusion** Patients with decompensated ALD who survive their first hospital episode have high long-term mortality, mainly due to liver disease, which is reduced but not prevented by abstinence.

**Disclosure of Interest** None Declared

# PTU-086 OUTCOME OF PATIENTS WITH ALCOHOL LIVER DISEASE ADMITTED TO INTENSIVE CARE IN A TERTIARY REFERRAL CENTRE – SINGLE CENTRE EXPERIENCE

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**Introduction** Hospital admissions with decompensated chronic alcoholic liver disease (ALD) have been increasing, leading to increased pressure on intensive care unit (ICU) services. We aimed to determine the outcome and prognostic factors for patients with ALD requiring admission to ICU.

**Methods** This was a retrospective study over a five year period (January 2006 – December 2010) of ICU admissions with ALD to St James' Hospital Leeds, either known or at first presentation. We reviewed in detail case notes and the laboratory database based on a pre-established proforma. ICU and hospital mortality were recorded along with outcome in diagnostic and organ support subgroups.

**Results** 29 patients with ALD admitted to ICU were included, median age 46 yrs, 79% males. 82.7% (24/29) were Child Pugh Score C. Mean ITU stay was 5.2 days. Overall ICU and hospital mortality was 51.7% (15/29) and 65.5% (19/29) respectively. 20 (69%) were previously known ALD and 9 (31%) were at first presentation. ICU and in hospital mortality in first presentation ALD group was 67% (6/9) and 89% (8/9) compared with 45% (9/20) and 55% (11/20) respectively for previously known ALD. The reasons for admission to ICU were variceal bleeding (59%), sepsis (17%) and 37% other (encephalopathy, other causes of bleeding, seizures, renal support). ICU and in hospital mortality in the variceal bleeding subgroup was 47% and 58% respectively compared to 100% ICU and hospital mortality for sepsis. Patients with multiorgan failure had the worst prognosis. Organ failure was predefined based on level of support required on admission to ITU.

## Abstract PTU-086 Table 1 Mortality in organ failure subgroup

Number of organ failure	n	ICU Mortality n (%)	Hospital Mortality n (%)
1	5	1/5 (20)	3/5 (60)
2	4	1/4 (25)	2/4 (50)
3	13	8/13 (61)	12/13 (92)
4	7	5/7 (71)	7/7 (100)

**Conclusion** Mortality remains high in ALD patients admitted to ICU. In this study, acute variceal bleeding and single or dual organ support were associated with better survival outcomes compared with other presentations and outcomes were not better in patients presenting for the first time with ALD compared to recurrent admissions. Escalation therapy to ICU for patients with sepsis or requiring multiple organ support may be futile.

**Disclosure of Interest** None Declared

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# PTU-087 WITHDRAWN BY AUTHOR

# PTU-088 VARIATION IN PRACTICE OF MANAGEMENT OF SPONTANEOUS BACTERIAL PERITONITIS (SBP)

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**Introduction** Spontaneous Bacterial Peritonitis (SBP) is the most frequent and life-threatening infection in patients with liver cirrhosis, requiring prompt recognition and treatment. Clinical practise guidelines on management of SBP were released by EASL in 2010<sup>1</sup> and AASLD in 2009<sup>2</sup>. We wanted to determine if there is uniformity in SBP management in hospitals in Wales, UK.

**Methods** Invitation to online survey was sent via email link to all WAGE members (Welsh Association for Gastroenterologists and Endoscopists). 25 members responded and results analysed. There were total of 10 questions with focus on diagnosis and drug treatment.

**Results** 76% of respondents would test for SBP in any cirrhotic ascites including day case routine admissions for therapeutic paracentesis; 12% do not test for day-case asymptomatic patients. 12%

test only if presence of sepsis and 4% only if patients are encephalopathic. Only 28% have access to lab polymorphonuclear leucocytes in ascites to confirm SBP; 60% use White Cell Count (WCC) > 250 and 16% use WCC > 500 in ascitic fluid as criteria. Cefotaxime (52%) and Tazocin (32%) were the preferred antibiotic choices with treatment duration ranging between < 5 days (4%), 5–7 days (40%) and > 7 days (56%). Surprisingly, 8 out of 22 respondents (36.3%) do not administer albumin routinely for confirmed SBP but 100% prefer 20% human albumin compared to 4.5% human albumin. There was huge discrepancy in the albumin administration regime between the members. One Consultant gives Terlipressin to all SBP but 24% will consider terlipressin if patients are at high risk of hepatorenal syndrome. 4% routinely repeat diagnostic ascitic tap after 48 hours on SBP treatment while 20% repeat only if infection not settling; 64% do occasionally and 12% 'never' repeat. A good 16.7% members do not start prophylactic antibiotics after an episode of SBP but with others, Ciprofloxacin (50%) and Norfloxacin (30%) are favourites. 96% are not in favour of primary antibiotic prophylaxis for ascites with low protein counts. Encouragingly, 45.8% would consider referral for liver transplantation in appropriate patients after an episode of SBP.

**Conclusion** Even among specialists dealing with chronic liver disease patients day to day, there is wide variation in management of SBP. It is alarming to note that doctors do not believe in secondary prophylaxis and do not administer albumin as part of treatment. There is serious need to standardise treatment and prevent improper management that can cause deterioration in liver function rendering them poor candidates for transplantation.

**Disclosure of Interest** None Declared

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## PTU-089 AUDIT ON FACTORS THAT PREDICT BONE DISEASE IN CIRRHOSIS

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**Introduction** Osteodystrophy is a recognised complication with cirrhosis. Female sex, cholestasis, low BMI are proven to increase risk of bone disease in cirrhotics<sup>1,2</sup>. Our aim is to audit our current practise of diagnosis and management of osteoporosis in liver patients and to identify other associated risk factors.

**Methods** Retrospective audit was done on 73 cirrhotic patients enrolled in the Hepatocellular Carcinoma (HCC) surveillance programme in our hospital. Our practise was compared with British Society of Gastroenterology (BSG) recommendations<sup>2</sup>. Data on demographics, aetiology of cirrhosis, alcohol or steroid intake, post menopausal state, presence of varices, investigations for osteoporosis done and treatment given were collected and analysed.

**Results** Only 34 patients had DEXA scan performed at any point, with average duration between cirrhosis diagnosis and first scan being 2.41 years. 14 had osteoporosis (T score < -2.5) at hip or lumbar spine and 11 were osteopenic (T of -1.5 to -2.5), showing a prevalence of bone disease at 73.5%. On analysis, except for female sex, no other variable increased risk of bone disease. Few patients were tested for Vitamin D (6.8%) or hormonal studies (8.1%) but 78% had thyroid tests and 100% had bone profile. Treatment for osteoporosis was given, as recommended in all subjects; however 2-yearly follow up scans happened only in 19.2%. Though 6/11 patients had varices, association was not statistically

significant by Pearson chi-square test (p value of 0.058). Similarly, longer duration of cirrhosis did not increase risk as analysed by t-test.

**Conclusion** Our audit showed high prevalence of bone disease (osteoporosis and osteopenia) in chronic liver disease patients, however there is bias as DEXA scans were requested only in symptomatic patients. There was poor compliance with BSG guideline especially with surveillance intervals. Female sex increases risk but the association of bone disease with duration of cirrhosis and presence of varices are not statistically significant.

**Disclosure of Interest** None Declared

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## PTU-090 WITHDRAWN BY AUTHOR

## PTU-091 TRANSIENT ELASTOGRAPHY AS A PREDICTOR OF OESOPHAGEAL AND GASTRIC VARICES

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**Introduction** Screening for varices with two yearly gastroscopy is recommended practise for all patients with liver cirrhosis. Prevalence of oesophageal or gastric varices in patients with liver cirrhosis varies in the literature from 30–70%.

The Aim of this study was to analyse if the result of transient elastography (TE) can be used to predict the risk of developing gastric and/or oesophageal varices in cirrhotic patients. We compared this data with endoscopic and radiological evidence of portal hypertension.

**Methods** We analysed data of 807 patients who underwent TE examination at East Cheshire NHS Trust and identified 103 patients with suspected liver cirrhosis (liver stiffness score of >12.5 kPa). The cut off F4 liver fibrosis/cirrhosis varies between 14.5 kPa to 18.2 kPa for different aetiologies of liver cirrhosis. We evaluated results of TE against upper GI endoscopy and abdominal ultrasound/CT.

**Results** 26% of patients with F4 liver fibrosis/cirrhosis were found to have oesophageal/gastric varices at endoscopy. A total of 37% patients had evidence of portal hypertension on USS or CT. Only 41% of patients with splenomegaly were found to have oesophageal/gastric varices. 78% of those found to have varices had a liver stiffness score of >25 KPa.

Abstract PTU-091 Table

Liver Stiffness (kPa)	Number of patients	Percentage of patient
70.1–75	12	44.44
40.1–70	4	14.81
25–40	6	22.22
20–24.9	2	7.4
12.5–19.9	3	11.11

**Conclusion** We postulate that TE helps us to stratify a patient's risk of developing oesophageal/gastric varices, according to their liver stiffness score. The likelihood of developing oesophageal/gastric varices increases with increased liver stiffness. Patients with liver stiffness scores lower than 25kPa may avoid unnecessary upper GI endoscopy.

**Disclosure of Interest** None Declared