Introduction The relationship between development of ALD (which affects only 10–15% of heavy drinkers) and rate, duration and age of onset of alcohol consumption is incompletely understood. We have previously reported on total lifetime alcohol consumption in two cohorts of heavy drinkers (> 60 Units/wk(M) or > 40 Units/wk(F) for ≥ 5 years): one (patients) with decompensated ALD (Child Grade B or C, negative tests for other liver diseases) and one (controls) without serious liver disease on clinical, laboratory and ultrasound examination. Here, we aimed to compare alcohol consumption patterns in these cohorts in more detail.

Methods Subjects (330 patients, 234 male, mean age 48 yr and 238 heavy-drinking controls, 187 male, mean age 48 yr) completed a lifetime alcohol questionnaire. Alcohol consumption was calculated at home and outside home, and during Monday-Thursday and Friday-Sunday. Data were summed over each stable drinking period during the subject's lifetime. We calculated (a) total duration, and age at start and at cessation of all periods during which the subject drank > 0, > 40, > 80, > 120 and > 160 units(U)/wk and (b) percent of drinking career engaged in: regular drinking, drinking < 5 days per week, weekend drinking and not drinking.

Results

Abstract PTU-100 Table

	PATIENTS		CONTROLS	
Units/wk	Duration (yr)*	Age started(yr)*	Duration (yr)	Age started (yr)
> 0	30 (23–36)	17 (16–18)+	30 (23–36)	16 (15–18)
> 40	20 (14–27)	22 (18–30)+	22 (16–30)	19 (17–25)
> 80	12 (6–19)	29 (21–38)+	13 (7–22)	25 (18–33)
> 120	3 (0–12)	32 (24–41)++	4 (0–10)	28 (21–37)
> 160	0 (0–7)	33 (27–41)+++	0 (0–7)	30 (24–39)

*: median (interquartile range). +: p < 0.001, ++: p = 0.02, +++: p = 0.017 by Mann-Whitney test for patients vs controls.

Neither total duration of periods consuming > 0, > 40, > 80, > 120, and > 160 U alcohol/wk (table) mean weekly consumption during those periods (not shown) differed significantly between patients and controls. However, patients first started drinking over each level at an older age than did controls (table). The relationships between ALD and age of starting drinking > 0, > 40, > 80, > 120 and > 160 U/week persisted in multivariate analysis (p = 0.00–0.013). Subjects spent 83(63–97)% of their careers in regular drinking, with no case-control differences.

Conclusion Development of decompensated ALD in heavy drinkers is associated with starting heavy drinking at an older age.

Disclosure of Interest None Declared

REFERENCE

J Hepatol 2012; 56:S53

PTU-101 PATIENTS WITH SCHISTOSOMAL PORTAL HYPERTENSION HAVE HIGH CONCENTRATION OF FIBROTIC AND INFLAMMATORY MARKERS

doi:10.1136/gutjnl-2013-304907.191

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Introduction Worldwide the commonest cause of portal hypertension is cirrhosis, but in tropics schistosomiasis is a major cause. Parts of Zambia are hyper-endemic, with up to 77% prevalence in some areas. Due to preservation of hepatocellular function, prognosis of gastrointestinal bleed due to hepato-splenic schistosomiasis is considered better than in cirrhosis. To confirm liver fibrosis the gold standard is a liver biopsy but this is invasive and and prone to sampling error. We set out to observe the fibrotic markers and also evaluate inflammatory makers in patients with hepato- splenic schistosomiasis at the University Teaching Hospital (UTH) in Zambia.

Methods This is a case control study of schistosomal related portal hypertension at the University Teaching Hospital in Lusaka Zambia. 40 patients have been recruited since mid September 2012 and the study is ongoing. All patients had varices. Blood was drawn to cheque full blood count, viral hepatitis profile, renal and liver function tests. Laminin and hyaluronic acid were used as markers of liver fibrosis while TNF receptor 1 and sCD14 were used as markers of inflammation. Serology for Schistosoma antibodies was done. Stool for parasitology and abdominal ultrasound were done. All patients were on propranolol or nadolol aiming for the pulse of less than 60/minute.

Results 40 patients were evaluated. The sex ratio was M:F 23:17 and the mean age was 40.5. Serology for schistosomiasis was positive in 34 (85%) and negative in 6 (15%) patients. All patients were sero-negative for HIV except one and were sero-negative for hepatitis B and C viruses. All patients had marked thrombocytopenia with the median being 49 × 10^9/L (IQR 33.5–69.5) × 10^9/L. Median ALT was 29.35 U/l (IQR 22.1–41.2) with 77.5% in the normal range. Of the 28 patients who submitted stool for parasitology 17 (61%) had no organism isolated, 4 (14%) had hook worms, 3 (11%) had Schistosoma eggs, 2 (7%) had ascaris and 2 (7%) had other organisms. Laminin levels (median 1608 ng/l, IQR 1416–1898) were all above normal. Hyaluronic acid levels were all higher than any of the standards in the ELISA kits and will have to be diluted to obtain precise values. All patients had elevated inflammatory markers: TNF receptor 1 concentrations were 10965 pg/ml (IQR 7990–15660; upper limit of normal 1966 pg/ml). Soluble CD14 values measured in ng/ml were equally found to be higher, median being 2469 (IQR1792–3119); upper limit of normal 2200ng/ml.

Conclusion Schistosomiasis is a leading cause of portal hypertension in Zambia and it is associated with high levels of liver fibrotic markers which could be used to assess disease severity. It appears like hepato-splenic schistosomiasis induces high levels of inflammatory markers such as TNF receptor 1 and s CD14.

Disclosure of Interest None Declared.

PTU-102 ALCOHOLIC LIVER DISEASE IN WORKING AGE MEN CONSTITUTES THE MAIN BURDEN OF LARGE VOLUME PARACENTESIS (LVP) IN DEVON AND SIGNIFICANT COST SAVINGS ARE POSSIBLE

doi:10.1136/gutjnl-2013-304907.192

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Introduction The burden of liver disease is steadily rising in the UK, partly secondary to alcohol misuse. Ascites requiring LVP is one of the major complications leading to hospital admission in patients with cirrhosis. Clear guidelines[1] exist regarding correct replacement of albumin and these also state that routine use of blood products to correct coagulopathy is not necessary. However, these are not always consistently applied.

Our aim was to assess the demographic data of patients with cirrhosis undergoing LVP at our centre along with the use of albumin replacement and blood products.

Methods We identified patients who had undergone LVP at our hospital during a 12 month period from October 2010 by reviewing the admission book of our department and by reviewing a list of all

the ascitic fluid samples sent to our microbiology department. Case notes for these patients were reviewed and data were collected on patient demographics, aetiology of cirrhosis, use of blood products and human albumin solution (HAS) and volume of ascites drained.

Results 56 LVP were performed on 28 patients. 24 were male, age range 30 – 84 years (median 59 years). Alcohol was either the only or a contributory cause of cirrhosis in 25 (89%) of patients. None had hepatitis B or C virus infection.

5 patients received fresh frozen plasma (14 units in total) and 1 received octaplex® prior to LVP. The total cost was £1024.

8 patients had less than 5L ascites drained and received a total of 19 units of 20% HAS. 16 patients received more than 8g albumin per litre of ascites drained (a total of 31 unnecessary units). The total cost of this was £1400.

The potential cost saving per procedure was £49.47. However data on albumin administration was unavailable for 7 patients and this could be an underestimate.

Conclusion Alcohol is the predominant cause of cirrhosis requiring LVP in our population and working age men constitute the largest proportion. Significant cost savings can be made by avoiding unnecessary blood products and by avoiding excessive use of albumin or administering other fluids when less than 5 litres of ascites are drained. Trusts should ensure relevant protocols are in place.

Disclosure of Interest None Declared

REFERENCE

1. EASL clinical practise guidelines on the management of ascites, spontaneous bacterial peritonitis, and hepatorenal syndrome in cirrhosis. *Journal of hepatology* 2010; 53(3):397–417.

PTU-103 AUDIT INTO THE MANAGEMENT OF ACUTE VARICEAL BLEEDS AND THE ROLE OF TIPS

doi:10.1136/gutjnl-2013-304907.193

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Introduction The mortality associated with acute variceal bleeding is significant with a 70% risk of recurrent haemorrhage in survivors. Our aim was to assess the outcome from variceal bleeding at St George's Hospital over a one year period, to determine whether current clinical guidelines in the management of variceal bleeding are being adhered to, and to assess whether we are utilising the role for early TIPS (transjugular intrahepatic portosystemic shunt) in patients with variceal bleeding.

Methods A dataset of all adult patients admitted from 1/4/11 for a period of 12 months was obtained with a primary diagnosis code of K922 Gastrointestinal haemorrhage, unspecified (n = 378). Genuine cases were confirmed by reference to the Micromed endoscopy reporting tool, CEPOD emergency theatre lists, bereavement records and old inpatient lists for the Hepatology firm. Case notes were obtained for the final sample of 23 patients.

Results The main cause of variceal bleeding (65%) was alcoholic liver disease (ALD). 78% were rebleeds of which 83% were within the last 6 months. 61% of patients had features of decompensation (ascites 86%, renal dysfunction 29%). Only 4% of cases were Childs-Pugh A, with 61% of cases being Childs-Pugh B and 35% Childs-Pugh C. The predicted 3 month mortality according to the MELD (model for end stage liver disease) score was 6–19.6%. An average of 2 to 3 units of blood was transfused to 78% of patients and 60% of patients required either FPP, platelets or both. All patient received an endoscopy during their admission, of which 74% were carried out within 12 hours. Only 52% were intubated for procedure and 39% were admitted to ITU post procedure. 96% received antibiotics, 87% received terlipressin and 79% were discharged on propranolol. Only 35% of patients received sucralfate post banding.

Only 13% of patients had a TIPS procedure. A further 48% of our sample could have been considered for TIPS where no contra-indication was found (i.e hepatic encephalopathy not secondary to UGI bleeding or renal dysfunction). The average length of stay was 14 days and the 30 day mortality rate was 13%.

Conclusion The pharmacological management was generally good and our mortality rate of 13% was better than the quoted figures of 30% in the literature. However, we identified a possible 48% of the sample could have been considered for TIPS which is no longer considered rescue therapy alone with good evidence for its early use, with subsequent prevention of readmission from a variceal bleed.

We recommend early pharmacotherapy with terlipressin and antibiotics as soon as varices are suspected with early ITU involvement, airway protection at endoscopy and early TIPS in selected patients.

Disclosure of Interest None Declared.

PTU-104 SINGLE CENTRE MANAGEMENT OF PYOGENIC LIVER ABSCESSES: SURPRISINGLY POOR BUT MORTALITY STILL LOW

doi:10.1136/gutjnl-2013-304907.194

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Introduction Untreated, pyogenic liver abscesses have a mortality approaching 100%. Three admissions in a week sparked interest in the best management of this condition. Although common, no comprehensive management guidelines could be found, prompting further review into how well this condition was managed locally

Methods Retrospective analysis of all patients admitted to Watford Hospital between 2006 and 2011 with a diagnosis of pyogenic liver abscess. Data was collected to evaluate use of cultures, radiological intervention (aspiration or drain insertion), source of infection, investigation for cause, follow up and outcome

Results Fourty four admissions were identified: 39 patients with 5 re-admissions. Mean age was 62 yrs, 59% male, 41% female. Eleven patients were managed by the Gastro team.

Assumption of source was made on CT imaging results: 46% presumed portal translocation (most diverticular disease), 36% biliary, 18% unidentified. Blood cultures were taken in 24 patients (42% positive). Abscess aspirates were taken in 33 cases, sent for culture in 30 (50% positive). Presumed biliary or unidentified sources grew gramme negative organisms in 12/13 cases. Presumed portal sources grew gramme positives in 7/8 and anaerobes 1/8.

Abscess size was < 3 cm in 5 cases (incl. 2 readmissions). Four received anitbiotics (Abc) alone:resolution in 3/4, 1/4 no follow up. One was managed to resolution with Abc and aspiration. Mean length of stay was 11 days.

In 6 patients the abscess was 3–5 cm. In this group, 1 patient with malignancy died, 1 treated successfully with Abc alone. The remaining 4 were treated with Abc and aspiration: 1/4 resolution, 1/4 readmitted, 2/4 no follow up. Mean length of stay 15 days.

Thirty three patients had abscesses > 5 cm (incl. 3 readmissions). Nineteen were treated with Abc and drainage: 2/19 had underlying malignancy and died, 6/19 resolution, 3/19 readmitted, 7/19 no follow up, 1/19 referred to surgery. Of the remaining fourteen, 3/14 had Abc alone (2 resolved, 1 patient with two readmissions no follow up), 1/14 a readmission referred for surgery and 10/14 Abc and aspiration. Outcome in these ten: 1/10 mutiple aspiration, 2/10 drain insertion, 1/10 surgical referral, 1/10 readmitted, 1/10 partial response, 3/10 no follow up, 1/10 resolution. Mean length of stay in > 5 cm group : 27 days.