parameters were collected, and differences in disease phenotype correlated with age at presentation (SPSSv21).

Results The median age of disease presentation in our cohort was 44 years (IQR:25–56). Although there was no significant correlation between patient age and mode of disease presentation, younger age was more commonly associated with lower baseline serum ALP (Spearman's *rho* = 0.239; *P* = 0.011). Patient age negatively correlated with ALP:AST ratio (*rho* = 0.252; *P* = 0.008); however, there was no correlation with serum AST, bilirubin, albumin, platelet count, INR, IgG titre or ANA/ASMA status. Using quartile cut-points in order to compare extremes of age, individuals presenting below the age of 25 (Q4; 7.6; 3.2–13.0) (*P* = 0.023). Age <25 at disease presentation was more often associated with an ALP:AST ratio <1.5 (11/25 [44%] vs. 4/25; [16%], *P* = 0.017). There were no significant differences in IBD phenotype, number of patients meeting transplantation or median time to transplant.

Conclusion Younger patients more commonly have a lower ALP/AST ratio at disease presentation, and may indicate a more 'inflammatory' PSC phenotype.

Disclosure of Interest None Declared.

PTU-126 MORTALITY ASSOCIATED WITH HEPATIC ENCEPHALOPATHY IN PATIENTS WITH SEVERE LIVER DISEASE

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10.1136/gutjnl-2014-307263.200

Introduction Despite hepatic encephalopathy (HE) being a common complication of severe liver disease, there are comparatively few data describing the epidemiology of the condition. The aim was to characterise mortality risk for patients with HE.

Abstract PTU-126 Table 1 Adjusted hazard ratios associated with hepatic encephalopathy for patients with severe liver disease

	HR	(95% CI)	p
HE defined as time dependent covariate			
HE status (HE +: HE −)	1.430	(1.204–1.699)	0.000
Age	1.040	(1.038–1.042)	0.000
Gender (female : male)	0.828	(0.786–0.871)	0.000
Baveno status (:1)			
2	0.827	(0.702–0.975)	0.023
3	1.566	(1.469–1.669)	0.000
4	1.278	(1.197–1.365)	0.000
Charlson index	1.127	(1.112–1.143)	0.000
Smoking status (:never smoked)			
Ex-smoker	1.010	(0.948–1.075)	0.767
Current smoker	1.159	(1.089–1.233)	0.000
HE status compared to matched controls			
HE status (HE +: HE −)	2.281	(1.816–2.866)	0.000
Age	1.018	(1.006–1.029)	0.002
Gender (female : male)	0.804	(0.634–1.021)	0.073
Baveno status (:1)			
2	0.710	(0.365–1.381)	0.313
3	1.139	(0.853–1.52)	0.377
4	0.823	(0.614–1.104)	0.194
Charlson index	1.067	(1.008–1.13)	0.026
Smoking status (:never smoked)			
Ex-smoker	0.933	(0.708–1.228)	0.620
Current smoker	0.871	(0.671–1.132)	0.302

Methods The study was conducted using data from the Clinical Practice Research Datalink (CPRD). Patients with a record of first diagnosis of liver disease were identified between 1998 and 2012. Two Cox Proportional Hazard models were generated. The first followed the whole liver disease cohort with HE modelled as a binary time-dependent variable in quarterly segments. The second compared patients identified with HE to non-HE controls matched at a ratio of 1:1 on age, gender, year of first diagnosis of liver disease, liver disease duration and Baveno IV status.

Results 17,030 patients were identified with a diagnosis of liver disease, of whom 551 (3.2%) had a HE diagnosis. Of patients identified with HE, 304 of 551 (55.2%) died during the follow-up period, compared with 6,693 of 16,479 (40.6%) of those without HE (p < 0.001). In the Cox Proportional Hazard model, the hazard ratio of HE modelled as a time-dependent variable was 1.43 (95% CI 1.20–1.70; p < 0.001) (Table 1). 389 of the 551 HE patients (70.6%) could be matched to non-HE controls. 226 HE patients (58.1%) died during the follow up period compared with 126 (32.4%) controls. The hazard ratio for time to death was 2.28 (95% CI 1.82–2.87; p < 0.001).

Conclusion HE substantially increased mortality risk in patients with chronic liver disease.

Disclosure of Interest C. Morgan Consultant for: Norgine; S. Jenkins-Jones Consultant for: Norgine; A. Radwan Employee of: Norgine; P. Conway Employee of: Norgine; C. Currie Consultant for: Norgine.

PTU-127 RESOURCE USE ASSOCIATED WITH HEPATIC ENCEPHALOPATHY IN PATIENTS WITH SEVERE LIVER DISEASE

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10.1136/gutjnl-2014-307263.201

Introduction Overt hepatic encephalopathy (HE) is associated with frequent hospitalisations which are expensive to manage and result in poor quality of life. The aim was to estimate the resource use associated with HE and hospitalisation in the UK.

Methods The Clinical Practice Research Datalink (CPRD) with linked hospital data from Health Episode Statistics (HES) was used to identify patients with a first diagnosis of liver disease between 1998 and 2012 and examine their all-cause hospitalisations. HE patients were matched to controls at a ratio of 1:1 by age, gender, year of diagnosis, duration and severity of liver disease. Hospital admission data (frequency and length of stay) were characterised from HES. Admissions associated with the index diagnosis of HE were excluded.

Results 17,030 patients were identified with an incident diagnosis of liver disease, of whom 551 (3.2%) had a recorded diagnosis of HE. 389 patients (70.6%) could be matched to non-HE controls. Total number of primarily liver-related admissions was greater in the HE group with a crude admission ratio of 3.588 (95% CI 3.085–4.173; p < 0.001). In the HE group, a significantly greater proportion of liver-related admissions were through AandE (62.1% vs. 50.0%, p < 0.001) and mean length of stay was 8.0 days (sd 11.6) vs 6.8 days (sd 9.5) (p = 0.148) in the non-HE group. Following first HE event, patients had

18.2 primary care contacts per patient year compared with 8.7 for non-HE controls ($p < 0.001$).

Conclusion HE was associated with increased risk of liver-related hospital admissions and increased GP attendances.

Disclosure of Interest J. Orr: None Declared, C. Morgan Consultant for: Norgine;, M. Hudson: None Declared, S. Jenkins-Jones Consultant for: Norgine, P. Conway Employee of: Norgine, A. Radwan Employee of: Norgine, C. Currie Consultant for: Norgine.

PTU-128 A WEB-BASED SURVEY TO INVESTIGATE PHYSICIANS' AND INTENSIVISTS' ATTITUDES TO CRITICAL CARE ADMISSION FOR CIRRHOSIS AND MULTIPLE ORGAN DYSFUNCTION

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10.1136/gutjnl-2014-307263.202

Introduction Hospital admissions for cirrhosis and related complications are rising and patients are getting younger. Hence, physicians are increasingly faced with making difficult referrals to intensive care for patients with multiple organ dysfunction. We examined the attitudes of a mixed cohort of physicians and intensivists, including trainees, to compare critical care admission decisions for a range of medical diagnoses including cirrhosis.

Methods A web survey containing eight clinical scenarios, including one describing a 45 year old man with severely decompensated ALD (bilirubin 410 umol/L), sepsis and renal failure (prior to resuscitation) was advertised via email to trusts in the south of England. Respondents were asked to rate the degree with which they would advocate for ICU admission on a scale on 1–10 (1 = would not consider ICU, 10 = insist on ICU). All cases had similar SOFA scores (10–11). Other cases included pneumonia, chronic airways disease, GI bleeding with loss of output, relapsed myeloma, post operative aspiration, ruptured AAA, and CKD requiring renal replacement. Opinions on the level of organ support to be offered, or alternatively the ceilings of de-escalated care were further explored.

Results Of 144 respondents, 23% were consultant physicians, 22% consultant anaesthetists and 22% specialist trainees. Mean advocacy score for ALD was 7.2, which ranked 4 out of 8 scenarios. COPD scored lowest, with a mean score of 4.9, acute on chronic kidney disease highest with 8.5. 55% would strongly advocate for escalation (score 8, 9 or 10). Of the 21 who did not favour escalation to ICU (score 1–5), "unlikely to survive ICU admission" (80%) and "end stage organ disease" (85%) were the most frequently cited reasons, and 6 cited "lifestyle decision". 9 recommended making the patient DNACPR and 3 would institute palliative care measures. Of the majority who would consider escalation, 69% recommended "No limits on care – full escalation". In a separate question 34% of all respondents said they "frequently" (12%) or "sometimes" (21%) considered resource utilisation or cost when making individual clinical decisions on escalation of care.

Conclusion Most respondents favoured escalation of care to some degree, however a significant minority interpreted the same clinical information with a degree of prognostic pessimism. Continued education regarding early opportunities to improve prognosis in decompensated liver disease is required.

Disclosure of Interest None Declared.

PTU-129 THE ROLE OF PRIMARY RESECTION AND HEPATIC RESECTION IN THE MANAGEMENT OF METASTATIC PANCREATIC NEUROENDOCRINE TUMOURS WITH IRRESECTABLE LIVER METASTASES

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10.1136/gutjnl-2014-307263.203

Introduction More than 40% of pancreatic neuroendocrine tumour (PNET) patients have liver metastases (LM) at diagnosis. Whilst it is agreed that, where possible, curative surgery offers the best outcomes, the role of debulking surgery in the context of irresectable LM remains unclear. There is also no clear evidence to support resection of the pancreatic primary in the context of irresectable liver metastases. The aim of this study is to investigate the survival benefits of different surgical treatments of LM.

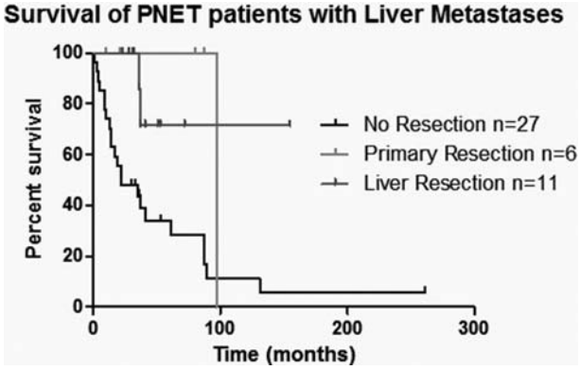
Methods The notes of 111 PNET patients who had visited King's since 2004 were reviewed. 53 had LM at diagnosis and were divided into 3 cohorts: No Resection (NR) n = 27, Pancreatic Resection (PR) n = 6 and Pancreatic and Liver Resection (PLR) n = 11. Median follow-up was 40.2 months.

Results Median survival for all patients with liver metastases was 61.1 months. Survival was significantly worse for patients with no resection; NR (23 months) vs. PR (98 months) p = 0.047, NR (23 months) vs. PLR (n/a) p = 0.008, but there was no significant difference between PR and PLR. Of the 11 PLR patients, 6 received debulking rather than curative resection. Univariate analysis showed no significant survival difference between dubulking and curative liver resection; however, multivariate analysis showed that resectability of liver metastases was not a significant prognostic variable.

Conclusion Resection of the primary significantly improves survival in the presence of irrespectable liver metastases.

There may be a role for debulking surgery in patients with irresectable liver metastases, however, the data so far does not appear to suggest a survival benefit over primary resection alone; larger studies are needed.

Disclosure of Interest None Declared.



Abstract PTU-129 Figure 1