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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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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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