NHS was undertaken on archived liver tissue specimens. Three chemical analysis via application of a monoclonal antibody to IgG4 +ve plasma cells are observed in a cohort of patients with AIH. The median age of patients at diagnosis was 31 years and 78% were female. Among this cohort 44 patients presented with chronic disease and histological evidence of chronic active hepatitis while 19 presented with acute disease in whom histology demonstrated hepatic collapse in 16 and severe lobular hepatitis in three patients. Only 7 of 65 samples (11%) demonstrated >10 IgG4 +ve cells/HPF. While there was a greater number of biopsy specimens with >10 IgG4 +ve plasma cells per HPF in acute vs chronic presentations this did not reach statistical significance (16% vs 9%, p=0.44). Additionally, there was no difference in the frequency of this finding between males and females (males 21% females 8% p=0.4) or between different ethnic groups (11% in Caucasians vs 10% in Afro-Caribbean, p=0.99). Importantly, in none of the seven cases in which >10 IgG4 +ve plasma cells/HPF were noted did the proportion of IgG4 +ve plasma cells equate to >40% of the total hepatic plasma cell infiltrate. Consequently, significant IgG4 +ve plasma cell infiltrates are not observed among non-Asian patients with AIH presenting to our institution.

Competing interests None declared.

REFERENCES

PTU-018 CYSTATIN C AND PROTEIN: CREATININE RATIO; POTENTIAL PREDICTORS OF EARLY ACUTE KIDNEY INJURY, RENAL REPLACEMENT THERAPY AND IN-HOSPITAL DEATH IN PATIENTS WITH CIRRHOSIS

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Introduction Acute kidney injury (AKI) is common, but difficult to predict in patients with cirrhosis as lower baseline serum creatinine can mask significant chronic kidney dysfunction. Cystatin C is a biomarker of glomerular filtration rate (GFR), which may overcome this weakness. Quantifying proteinuria using the widely available protein:creatinine ratio (PCR) may better the degree of structural glomerular damage.

Methods 34 patients with cirrhosis and mean (SD) age 51 (14) years and, median (range) Child-Pugh Turcotte (CPT) score 11 (9–11) were prospectively assessed for 10 days or until AKI developed. Baseline iohexol clearance was performed to calculate GFR and urine underwent PCR analysis. Daily urine and serum samples were collected for determination of novel serum and urine biomarkers of kidney injury, including Cystatin C. Biomarkers were assessed by area under the receiver operating curve (AUROC) for predicting AKI stage 1, renal replacement therapy (RRT) and death.

Results 16 (47%) patients developed AKI defined by an increase of >26.4 umol/l from baseline serum creatinine (median 73 range (37–120 umol/l)). Estimated GFR underestimated GFR with median eGFR 95 (47–181) ml/min/1.73 m² compared to a median iohexol clearance.