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Introduction Alcohol is the major cause of chronic liver disease (CLD), the fifth commonest cause of death in the UK. Traditionally, liver fibrosis has been assessed using liver biopsy. The enhanced liver fibrosis (ELF) test is a validated panel of biomarkers of matrix biology. We report the performance of the ELF test in assessing liver fibrosis and predicting liver related clinical outcomes (LRO) (morbidity and mortality attributable to cirrhosis) 7 years after ascertainment in subjects with alcoholic liver disease (ALD).

Methods Serum samples were obtained at the time of liver biopsy from 81 patients with a clinical diagnosis of ALD. The ELF test was performed at a central laboratory and liver biopsies were staged by one histopathologist using the Scheuer classification. Clinical outcomes were assessed 7 years (median) after biopsy in all patients by reviewing clinical notes, routine data sources and by contacting primary care physicians. Diagnostic performance of the ELF test for detection of histological stages of liver fibrosis, and in predicting LRO was assessed by calculating the area under the receiver operator characteristic curves (AUROC).

Results Median age was 47 years. Biopsies stages were; F0: 14 subjects (17%); F1: 17 (21%); F2: 5 (6%); F3: 17 (21%); F4: 28 (35%). The ELF test demonstrated good performance in identifying fibrosis at all stages (Abstract PWE-273 table 1). ELF predicted LRO at 7 years, AUROC=0.81 (95% CI 0.71 to 0.90). An ELF score ≥ 9.5 was better at predicting LRO than cirrhosis on biopsy ($p=0.002$), correctly predicting outcomes in 84% of patients with LRO compared to 55% predicted by biopsy.

Abstract PWE-273 Table 1

Fibrosis stage	Median ELF score (IQR)	AUROC (95% CI)
0 vs 1–4	9.26 (1.05) vs 11.06 (2.66)	0.89 (0.82 to 0.96)
0,1 vs 2–4	9.47 (1.12) vs 11.47 (2.05)	0.91 (0.84 to 0.98)
0–2 vs 3,4	9.49 (0.86) vs 11.74 (2.02)	0.89 (0.82 to 0.97)
0–3 vs 4	9.85 (1.62) vs 11.75 (1.96)	0.82 (0.73 to 0.92)

Conclusion In ALD, the ELF test correlates closely with histological staging conducted by an expert liver pathologist at all stages of fibrosis and performs better than biopsy staging in predicting LRO at 7 years.

Competing interests P Trembling: None declared, J Parkes: None declared, S Tanwar: None declared, A Burt: None declared, W Rosenberg Grant/Research Support from: Siemens Healthcare Diagnostics.

PWE-274 TACE OR TAE FOR TREATMENT OF HEPATOCELLULAR CARCINOMA?

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Introduction Transarterial Chemoembolisation (TACE) and Transarterial Embolisation (TAE) are established treatments for Hepatocellular Carcinoma (HCC) though the superiority of TACE remains uncertain. The aim of this study was to evaluate and compare the efficacy of these modalities.

Methods Data for all patients undergoing a first course treatment of TACE or TAE at Addenbrooke's NHS Hospital over a 22-month period were retrospectively reviewed ($n=41$). All patients had radiologically and/or histologically diagnosed HCC. 23 patients underwent TACE until May 2010 and a change in policy, followed by 18 patients receiving TAE (there were no changes in selection criteria).

11 (27%) patients were bridged to liver transplantation, while 30 (73%) patients were palliative. Outcome measures included radiological response to "treatment" (1–3 TACE or TAE sessions), complications and survival. The fisher exact probability test and unpaired t-test were used for comparisons.

Results Five patients who did not undergo follow-up imaging were excluded. Overall a radiological response (partial or complete) was seen in 67% of patients. No significant difference was seen between TACE and TAE although there was a trend towards complete response in the TACE group ($p=0.24$) (Abstract PWE-274 table 1). Although number of lesions did not correlate with radiological response, a non-significant trend was seen in relation to size of largest lesion (median 41 mm with response vs median 33 mm with no response). No patient in the waiting list group developed clinical complications whereas 6 (20%) of the palliative group developed a significant infective complication ($p=0.13$). Complications appeared more common in those receiving TACE compared with TAE (25% vs 6%, $p=0.15$). Median survival in palliative patients was 15.1 months (6 deaths with TACE, 3 with TAE). In the waiting list group 8/11 received TAE and 10 have undergone transplant (median wait time 141 days), the remaining patient active 13 months since listing.

Abstract PWE-274 Table 1

Outcome	TAE, (n=16)	TACE, (n=20)
No response	31%	35%
Partial response	63%	45%
Complete response	6%	20%

Conclusion This study has demonstrated reasonable efficacy of TAE for the treatment of HCC with minimal complications. There may be a trend towards more complete response with TACE though accompanied by increased complications. Both treatments appear similarly efficacious in prolonging survival which was favourable when compared with historical data.¹ TAE appeared effective in bridging patients to transplant and was well tolerated.

Competing interests None declared.

REFERENCE

1. Llovet JM, Ricci S, Mazzaferro P, et al. Sorafenib in advanced hepatocellular carcinoma. *N Engl J Med* 2008;**359**:378–90.

PWE-275 MULTIPLE ORGAN DYSFUNCTION SYNDROME (MODS), RATHER THAN THE NEED FOR RENAL REPLACEMENT THERAPY PER SE, DICTATES POOR PROGNOSIS IN PATIENTS WITH CIRRHOSIS ADMITTED TO ICU

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Introduction Critically ill cirrhotics admitted to ICU who receive renal replacement therapy (RRT) have a poor prognosis. It is unclear whether prognosis relates to renal dysfunction per se or whether RRT is one facet of MODS. We report the 7-year experience of outcomes and physiological disturbances in cirrhotics admitted to ICU who received RRT.

Methods We analysed physiological and biochemical variables on admission for 478 cirrhotic patients admitted to ICU, excluding those transplanted during that hospital admission. Patients were cohorted on RRT requirement (RRT⁺/RRT⁻) at any point during ICU admission. Outcome, organ failure scores and utilisation of organ support were recorded.