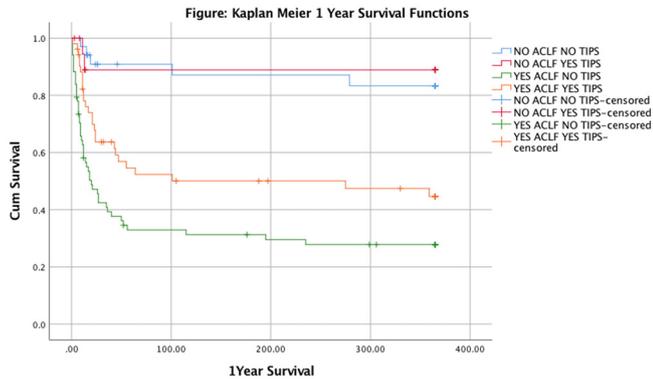


characterized by organ failure(s) and high-risk of mortality but whether it is of prognostic significance in OGVB patients is not known. Early TIPSS insertion in patients with ongoing bleeding is thought to improve survival, but whether patients with ACLF will benefit is not clear. The aims of this study were to determine whether ACLF and its severity defines the risk of death and whether TIPSS improves the survival of patients with poorly controlled OGVB and ACLF.

Method: From a prospectively maintained registry kept by the ICU, Royal Free Hospital (RFH), data of 174 consecutive patients with OGVB and evidence of ongoing bleeding despite endoscopic therapy between 2005 and 2015, who were admitted to ICU were included. All patients were managed according to the standard of care for acute OGVB and organ support was instituted when required. Early TIPSS was defined as technically successful TIPSS done within 72 hours of an acute OGVB episode. Standard statistical tests were used to address the above questions and Cox regression was used for multivariate modelling.

Results: ACLF patients (n = 120) were significantly different to AD (n = 54) [older age: p = 0.03; ascites: p = 0.002; hepatic encephalopathy: p < 0.001; >organ failures (p < 0.001); >white cell count (p = 0.007); >INR (p < 0.001); >bilirubin and creatinine (p < 0.001)] but the number of bleeds and transfusion requirements were similar. 28-day, 90-day and 1-year mortality in the AD patients was 9.3%, 9.3% and 13% compared with 46.7%, 55.8% and 60.8% in the ACLF groups (p < 0.001) respectively (Fig); mortality increased with increasing ACLF grade (p < 0.001). TIPSS was inserted in 72 patients [(Median time to TIPSS from Index bleed 1 day, (IQR: 0–3)] (AD: 20 (37%); ACLF: 52 (43%) (p = 0.4), which reduced mortality of ACLF (p = 0.01) but not in AD patients. In the multivariable model in patients who had ACLF, age (p = 0.009), temperature (p = 0.022), white cell count (p = 0.029), CLIF-OF score (1.323(1.111–1.576); p = 0.002) and TIPS placement (0.546(0.302–0.987); p = 0.045) (Fig) were independent predictors of mortality.



Conclusion: This study shows for the first time that, OGVB that is not controlled with endoscopic therapy, the presence and severity of ACLF and systemic inflammation determines the risk of 28-day and 1-year mortality. Early TIPSS improves the survival of ACLF patients.

AS047

Increased survival in patients with hepatic encephalopathy treated with rifaximin-alpha in combination with lactulose: an observational study from UK clinical practice

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Background and Aims: Hepatic encephalopathy (HE) is a neuro-psychiatric complication of cirrhosis signalling hepatic decompensation. Overt HE episodes are medical emergencies that render patients' incapable of self-care, and frequently result in hospitalisation, coma, and/or death. In randomized studies, rifaximin-alpha (RFX) in combination with lactulose (LCT) significantly reduced the risk of HE episodes and overt HE-related hospitalisations compared with LCT alone. It has been postulated that treatment with RFX should increase life expectancy in these patients. In this study, our aim was to evaluate the impact of RFX treatment on survival in "real-world" patients with HE in the United Kingdom (UK).

Method: Anonymised primary and secondary care health records from the Clinical Practice Research Datalink (CPRD) sourced HE patients treated with RFX and LCT, either as monotherapy or in combination, from 2003 to 2019 in primary care. Treatment was assumed to last for 28 days either side of prescription date. The primary endpoint was all-cause mortality (ACM) confirmed by national registration. Time to event from first proxy HE diagnosis (index) was analysed by extended Cox proportional hazards regression, where treatment and other covariates were modelled as monthly, updated, time-dependent parameters to maximise data availability.

Results: There were 4,669 patients newly diagnosed with HE, of which 61% were male, with a mean age of 59 years (SD 13), for whom 1,107 years of RFX, 1,500 years of LCT, and 1,157 years of RFX+LCT treatment were recorded. In total, 2,039 deaths were observed, at a rate of 271 per 1,000 person years. Compared to LCT-alone, RFX+LCT had an adjusted hazard ratio for ACM of 0.82 (95%CI: 0.70 to 0.96), while for RFX-treatment the aHR was 1.11 (95%CI: 0.94 to 1.30). Other ACM co-variables included age, gender, prior liver cancer, ascites, platelet count, estimated glomerular filtration rate, albumin and sodium.

Conclusion: Treatment with RFX+LCT improved survival compared to LCT-alone in routine clinical practice in the UK.

AS048

Supplementation with branched-chain amino acids improves muscle mass of cirrhotic patients with sarcopenia

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Background and Aims: It is controversial whether sarcopenia can be reversed in patients with liver cirrhosis. On the other hand, the effect of branched-chain amino acids(BCAA) supplementation on protein

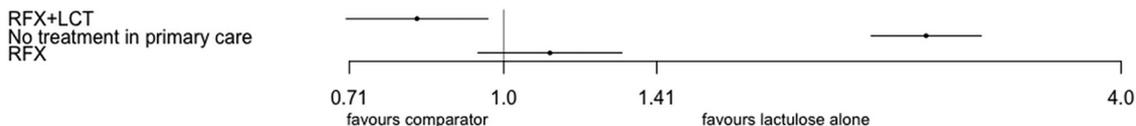


Figure: (abstract: AS047): Forest plot for RFX+LCT, RFX, and no treatment in primary care versus lactulose.