inclusion criteria. Patients were included if they had an increased BMI (≥30 or ≥27.5 in high risk ethnicities) or waist circumference (≥94 cm men or ≥80 cm women) and low alcohol intake (<28 units/week males or <21 units/week females). AST/ALT ratio, Fibrosis-4-score (FIB-4) and NAFLD score were calculated for each patient. Those with an increased fibrosis score were reviewed in outpatients and had further investigations; non-invasive liver screen, liver ultrasound scan and liver elastography.

**Results**

Out of the 82 included patients, 64 (78%) had at least one increased fibrosis score. Twenty-six patients with raised fibrosis score/s were reviewed in outpatient clinic and were offered further investigations. Of 15 patients who had an US scan 10 (66%) had fatty liver and the rest were normal. Twenty-one patients had liver elastography and 1 was found to have possible fibrosis with a fibrosis score of 8.1 kPa. Subsequent liver histology showed fibrosis, however it was thought to be drug induced.

**Conclusions**

Informal feedback from the staff performing the NHS Health Check indicated that incorporating the liver screen was not burdensome. However, based on these Results simple fibrosis markers are not a useful screening test for use in primary care, as the high false positive rate resulted in too many unnecessary referrals to secondary care to exclude fibrosis. It remains unclear how patients with liver fibrosis can be easily identified in primary care.

**PWE-078**

**SPONTANEOUS BACTERIAL PERITONITIS PROPHYLAXIS: ARE WE FOLLOWING GUIDELINES?**

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10.1136/gutjnl-2018-BSGAbstracts.220

**Introduction**

Spontaneous bacterial peritonitis (SBP) is the most common serious infection in patients with cirrhosis, occurring in 25% of those who develop ascites. It is associated with significant morbidity and mortality rates of 20%–40%. British Society of Gastroenterology (BSG) and National Institute of Clinical Excellence (NICE) guidelines recommend long-term prophylaxis (LTP) with Ciprofloxacin or Norfloxacin in patients with cirrhosis who have low ascitic fluid protein concentration (<15 g/L) with or without prior episode of SBP (primary LTP) or who have had an episode of spontaneous bacterial peritonitis (secondary LTP).1 2

**Methods**

We carried out a retrospective observational study using our electronic system for admissions with a diagnosis of ascites and cirrhosis across the East Kent Hospitals NHS Foundation Trust from April 2014 to April 2017. Ascitic fluid analysis Results were reviewed against discharge summaries to audit whether LTP was started according to national guidelines.

**Results**

337 cases of ascites with cirrhosis were identified (93 female: 244 male) with a median age of 58 (range 30–92 years). 61 out of 337 cases had a current or previous diagnosis of SBP. 5 out of 61 died during their admission. 10 out of 61 were discharged on secondary LTP and 46 patients were discharged without LTP. 11 out of 337 cases had low ascitic fluid protein with no current or previous episodes of SBP. None of these patients were discharged with primary LTP.

**Conclusions**

East Kent Trusts followed national guidelines in starting secondary LTP for SBP in 18% (10 out of possible 56) of cases and 0% of cases requiring primary LTP from April 2014 to April 2017. This low adherence rate may reflect lack of clinician awareness of guidelines for prescribing LTP for SBP in patients with ascites. There may also be a relation to local microbiology guidelines not following BSG or NICE guidelines on initiation of primary or secondary LTP for SBP. This study serves as a reminder to clinicians to carefully consider LTP in patients with ascites secondary to cirrhosis on each admission. We also recommend that trusts review local microbiology guidelines to ensure it adheres to national guidelines.

**REFERENCES**

Introduction In patients with primary biliary cholangitis (PBC), bilirubin (BILI) is a recognised marker of disease progression and a strong predictor of survival. Recently, the Global PBC Study Group reported risk with elevated BILI extends into the normal range with a cutoff of 0.67x ULN identifying patients at risk. Obeticholic acid (OCA) is indicated for treatment of PBC in patients with inadequate response or intolerability to ursodeoxycholic acid. This retrospective analysis aimed to evaluate the effect of OCA on BILI in this patient subpopulation.

Methods OCA has been evaluated in patients with PBC in one 12 month (mo) Phase 3 double-blind (DB) placebo (PBO)-controlled trial (POISE) and two 3-mo Phase 2 PBO-controlled trials (201 and 202). Patients were eligible to continue treatment in open-label extensions (OLE) with all patients receiving OCA. Patients from the Phase 2 and 3 trials with baseline (BL) total BILI (TBILI) >0.67 x ULN were evaluated for change in TBILI over 12 mo in the following manner: 1) DB comparison of OCA vs PBO at 12 mo in POISE and 2) DB + OLE OCA use totaling 1 year of treatment (POISE randomised to PBO, evaluated at 12 mo OLE; Phase 2 randomised to OCA for 3 mo, evaluated at 9 mo OLE; and Phase 2 randomised to PBO, evaluated at 12 mo OLE).

Results The analysis included patients with TBILI >0.67 x ULN at their OCA BL: POISE, n=51; 201, n=7; and 202, n=7. In patients with BL TBILI >0.67 x ULN, TBILI increased after 12 mo of PBO treatment, and decreased after 12 mo of OCA (table 1). In the DB phase of POISE, of the 7 PBO and 9 OCA patients with abnormal TBILI at BL, 14% of PBO and 78% of OCA patients attained normal TBILI levels after 12 mo. Further, of 10 PBO and 20 OCA patients with normal TBILI at BL, 60% of PBO and 13% of OCA patients worsened to abnormal TBILI after 12 mo. Patients treated with OCA had a trend toward reduction of TBILI compared with those treated with PBO. These data suggest that OCA may reduce progression of patients with more advanced liver disease.

Abstract PWE-080

**TITLE:** CHANGE IN BILIRUBIN WITH OBETICHOLIC ACID IN PRIMARY BILIARY CHOLANGITIS PATIENTS WITH HIGH BASELINE BILIRUBIN

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10.1136/gutjnl-2018-BSGAbstracts.222

**ABSTRACT:**

**Purpose:** To determine the change in bilirubin with obeticholic acid (OCA) treatment in primary biliary cholangitis (PBC) patients with baseline total bilirubin (TBILI) >0.67x ULN. This study was an analysis of data from the Phase 2 randomized controlled trials (POISE 201 and 202) and the Phase 3 open label extension (OLE) (POISE) trial of patients with PBC who were inadequately controlled with ursodeoxycholic acid.

**Methods:** The analysis included patients (n=51) with baseline TBILI >0.67 x ULN treated with OCA (n=29) or placebo (n=22) for 12 months (POISE phase 3), and patients (n=122) treated with OCA (n=80) or placebo (n=42) for 3 months in the OLE phase of POISE trial. Bilirubin was measured at baseline, day 2, days 5/7, 10, 14, and 28. Changes in TBILI were evaluated using paired t-tests.

**Results:** In the POISE 3-month trial, patients treated with OCA had a statistically significant reduction in TBILI compared to placebo (p=0.009). In the OLE phase of POISE trial, patients treated with OCA had a statistically significant reduction in TBILI compared to placebo (p=0.02).

**Conclusions:** Treatment with OCA results in a statistically significant decrease in TBILI in patients with PBC who are inadequately controlled with ursodeoxycholic acid. This effect is sustained for 3 months in the OLE phase of POISE trial.

**Abstract PWE-081**

**TITLE:** EARLY CHANGE IN ORGAN FAILURE SCORES PREDICTS SURVIVAL IN ACUTE ON CHRONIC LIVER FAILURE

**AUTHORS:** Sreeakshmi Kotha*, Alexandra Zira, Philip Berry, Guys And St Thomas’ Hospital, London, UK

10.1136/gutjnl-2018-BSGAbstracts.223

**ABSTRACT:**

**Purpose:** To identify patients at risk of death following acute-on-chronic liver failure (ACLF) before ICU admission.

**Methods:** We prospectively collected data from May 2013 – May 2016 on patients with ACLF admitted to ICU at Guy’s and St Thomas’ hospital, a tertiary non-transplant centre. We applied a validated organ failure score (SOFA) and the CLIF-CRF score to predict mortality in ACLF at ICU admission. The SOFA score was a simple organ score (1 point per organ dysfunction) while the CLIF-CRF score included patient and organ characteristics.

**Results:** We identified 171 potential patients with ACLF, of which 132 were included. The area under the receiver operating characteristic curve (AUC) for the SOFA score at day 28 and day 90 was 0.75 and 0.67 respectively. The CLIF-CRF score at day 5 and day 7 had AUC of 0.84 and 0.85 respectively. The CLIF-CRF score at day 28 had an AUC of 0.84, which was significantly better than the SOFA score. Using these scores, we identified a risk of death at day 28 of 33.8% and 37.6% respectively. The mean survival time (days) for patients with improved SOFA score was 16/48 (33.3%), 30/48 (62.5%), and 36/48 (75%).

**Conclusions:** This study suggests that early changes in organ failure scores can predict mortality in patients with ACLF. The results have implications for the early identification of patients with ACLF who are at risk of death, and may inform the use of interventions that could improve survival.

**Abstract PWE-080 Table 1**

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**Abstract PWE-081 Table 1**

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