



Abstract P171 Figure 1

**Methods** Data was obtained from the National Liver Transplant Registry and analysed using SPSS. Patients were divided into decade one (01/01/1994–31/12/2003) and decade two (01/01/2004–31/12/2013). Each patient was followed up for five years. Primary outcome was survival at five years.

We also created a subgroup analysis of emergency OLT and studied outcomes within this.

**Results** 704 transplants in total were performed over twenty years, 228 in the first decade and 476 in the second. We saw a trend towards improved survival outcome in the second decade [p 0.034] as five year survival increased from 74% to 81%, shown on Kaplan Meier curve below.

We found that we are performing more transplants for emergency indications than previously. Our numbers transplanted for acute liver failure increased from 40 in decade 1 to 53 in decade 2. Paracetamol overdose (POD) has become our commonest indication for emergency OLT [p0.004]. The five year survival for POD OLT has improved [p 0.005] from 17% to 83%.

**Conclusions** We have seen increases in the numbers of patients transplanted.

Long term survival following liver transplantation improved in Ireland 1994–2013. These improvements may be due to careful screening of prospective patients for comorbidities during OLT workup, and close monitoring post operatively for evidence of adverse effects of immunosuppression such as the metabolic syndrome, chronic kidney disease, and de novo malignancy.

Our outcomes in transplants for POD are significantly improving, this is most likely due to our increasing experience in terms of numbers transplanted, as shown in this study.

Overall across all indications for OLT our unit has shown an improvement in our five year survival and we are fully in line with international standards both in terms of numbers transplanted and outcomes (Annual report on Liver Transplantation 2016/2017. NHS Blood and Transplant).

#### P172 IDENTIFICATION OF PATIENTS WITH UNDIAGNOSED PRIMARY BILIARY CHOLANGITIS WITHIN CARDIFF AND VALE UNIVERSITY HEALTH BOARD

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**Introduction** Primary biliary cholangitis (PBC) is a chronic cholestatic liver disease that can eventually lead to liver cirrhosis and liver failure. Treatment with therapeutic doses of ursodeoxycholic acid (UDCA) improves liver related outcomes in majority of cases. Second line treatment options are also now available for those not responding to UDCA. The aim of this review is to identify patients with yet undiagnosed PBC in the Cardiff and Vale (CAV) population of 496,313 people with a positive anti-mitochondrial antibody (AMA) and cholestatic liver biochemistry, who are not under hepatology follow-up.

**Methods** Patients with a positive AMA titre ( $\geq 1:40$ ) performed in CAV since 2001 were identified from local biochemistry records. Clinical portal results were used to identify AMA positive patients with an elevated alkaline phosphatase (ALP) or *gamma-glutamyl transferase (GGT)* as likely having PBC. Engagement with hepatology/gastroenterology services was assessed via electronically available clinic letters and appointments recorded since 2001. Hepatology clinic review will be arranged for patients not under follow-up.

**Results** 647 patients with a positive AMA titre were identified. 124 of these patients, who are alive, also had a recorded elevated ALP/GGT, thus likely having PBC. 36 (29%) patients were not under specialist follow-up. Male to female ratio in this sub-cohort was 1:2.5 with a median age of 63 years (23–94). Median highest ALP recorded was 241 u/L (157–694). 5 patients were being treated with UDCA initiated in primary care with a mean dose of 700 mg OD (not known if on optimum dose).

**Conclusions** Liver antibodies are routinely checked as part of an autoimmune screen. This study has found a potential cohort of people with probable PBC who are not known to hepatology services and may be at risk of progressive liver disease. These patients will be invited to clinic to accurately stage their disease and optimise medical management. The British Society of Gastroenterology strongly recommends life-long follow-up for PBC patients. We would encourage other hepatology services to identify undiagnosed PBC patients using this approach, who would benefit from effective medical treatment.

#### P173 EXPLORATION OF THE USE OF URINARY VOLATILE ORGANIC COMPOUNDS IN COMPARISON TO ALPHA FETOPROTEIN

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**Introduction** Alpha fetoprotein (AFP) is no longer recommended by for routine use in hepatocellular carcinoma (HCC) surveillance. On the other hand, the analysis of volatile organic compounds (VOCs) is emerging in medical diagnostics for variety of diseases. VOCs are organic chemicals that can evaporate from liquid to gases. VOCs emerge from the cell membranes, following cellular damage, then find their way into the systemic circulation and finally excreted in the urine. Detection of urinary VOCs is of low cost ( $\leq$  £30/sample). We compared AFP to chemical signatures of the urinary VOCs in HCC patients.