(IDU) and HCV antibody prevalence rates reach 60–90% in those who have injected drugs. Treatment rates of injecting drug users (IDU’s) with HCV are low at just 3–10% and although small studies indicate treatment of IDU’s is safe and effective, data on outcomes of antiviral therapy in current injecting drug users is limited with the largest study published to date including just 31 active IDU’s. It has been suggested that antiviral therapy for HCV use may reduce illicit drug use, but published data to support this is lacking.

**Aim** To assess the treatment outcomes and the impact of antiviral therapy on illicit drug use in injecting drug users (IDU’s) treated with antiviral therapy for Hepatitis C virus (HCV) by nurses based in community addiction services in North East London. The outcomes of the first 81 patients to be treated are presented here, 48 of whom were using illicit drugs at the start of treatment making this the largest cohort of active IDU’s with HCV treated with antiviral therapy that has been presented to date.

**Method** Methods consisted of a retrospective database analysis. Illicit drug use was quantified as 3 (heavy/daily); 2 (weekly/moderate); 1 (monthly/occasional) and 0 (previous drug use). The Wilcoxon signed rank test was used for statistical analysis.

**Results** 81 patients were treated over a 43-month period from September 2004 to January 2009. 50 (62%) were genotype 2/3, and 31 (38%) were genotype 1. The average age of infection with HCV was 23, of diagnosis was 39 and of treatment was 41. Compliance with treatment was 88%. 63% of patients had a sustained viral response, 18% were non-responders and 10% discontinued treatment early due to side effects. 5 patients (6%) relapsed after successful treatment. Only 1 patient (1%) has been re-infected post treatment. 48 patients (60%) were actively using illicit drugs when HCV treatment was initiated. Data on pre and post treatment intravenous heroin use, crack cocaine use and alcohol use was available in 74, 40 and 21 patients respectively. Intravenous heroin use reduced from 41/74 patients (55%) to 27/74 (36%) (p = 0.0033) after treatment, with daily use reducing from 16/74 (22%) to 7/74 (9%) Crack cocaine use reduced from 32/40 (80%) to 21/40 (53%) (p = 0.0103) Alcohol use reduced from 15/21 (71%) to 13/21 (62%) (p = 0.5775).

**Conclusion** Nurse led provision of antiviral therapy for HCV infected injecting drug users in community based clinics is effective, with sustained viral response (SVR) rates that compare favourably with published randomised controlled trials of pegylated interferon and ribavirin. High rates of compliance are seen and re-infection rates are low, so concern over compliance and re-infection should not prevent treatment of injecting drug users. This study has shown for the first time that a significant reduction in illicit drug use occurs during and after antiviral therapy demonstrating a social benefit of treatment in addition to the known health benefits.

**REFERENCE**


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**P22**

**GALL BLADDER LENGTH ON ULTRASOUND AS A SCREENING TOOL IN IDENTIFICATION OF AUTO IMMUNE SCLEROSING CHOLANGITIS**

doi:10.1136/gutjnl-2011-300857a.22

**Introduction** Autoimmune liver disease (AILD) in children encompasses Autoimmune Hepatitis (AIH), Autoimmune sclerosing Cholangitis (ASC) or, where there are features of both, overlap syndrome (OS). Differentiating between these entities requires cholangiography. The gold standard for the diagnosis of ASC is Endoscopic Retrograde Cholangiopancreatography which is invasive. Magnetic Resonance Cholangiopancreatography can be used as an alternative but is not universally available and may require anaesthesia in young children. Anecdotally, we had found increased gall bladder (GB) length on ultrasound to be a useful marker of bile duct involvement in AILD.

**Aim** Our aim was to study the role of ultrasound measurement of Gall Bladder length as a screening tool for identifying ASC in children with AILD.

**Method** Children, under the age of 18 years at the time of presentation, diagnosed with AILD were identified from the departmental database. Cases for whom a fasting ultrasound at the time of presentation, was available on our radiology department’s digital imaging system were included. Cases were categorised using established criterion into 2 groups; those with AIH and those with ASC with or without OS. A retrospective case notes review was performed on all eligible children, their ultrasound scans were reviewed by a single radiologist and GB length measured.

**Results** 50 cases were included. 32/50 (64%) had AIH type 1 and 6/50 (12%) had AIH type 2. 12/50 (24%) had ASC and 6/50 (12%) of these had OS. The average age at presentation was 10.15 years (range 1.3–16 years). The age at presentation was similar for both groups (AIH 10.1 yrs; ASC 10.2 yrs). Overall there were 22 males and 28 females but among the group with ASC there were 8 males and 4 females. The duration of symptoms before diagnosis was 5 months and was similar in both groups. The median (25th, 75th centile) GB length in children with ASC was 9.75 cm (7.2 cm, 10.6 cm) and in children with AIH was 6.8 cm (5.5 cm, 7.9 cm) [p value 0.005]. The normal GB length in children older than 1 year is up to 7 cm. GB length >7 cm was seen in 9/12 (75%) children with ASC compared to 15/30 (50%) children with AIH (p = 0.04). GB length >9 cm was seen in 7/12 (58.3%) children with ASC and 4/30 (13.3%) children with AIH (p = 0.005).

**Conclusion**

**Conclusion Summary:** In AILD GB length is significantly increased in children with ASC. GB length >9 cm has 90% specificity for the diagnosis of ASC. GB length <7 cm is 88% exclusive of ASC.

**Conclusion:** GB length measurement is a useful screening test for ASC in children with AILD. We would recommend a further study with greater number of patients.

**P23**

**COMPARISON OF ENHANCED LIVER FIBROSIS TEST AND TRANSIENT ELASTOGRAPHY FOR THE NON-INVASIVE ASSESSMENT OF LIVER FIBROSIS IN CHRONIC HEPATITIS B**

doi:10.1136/gutjnl-2011-300857a.23

**Introduction** The enhanced liver fibrosis (ELF) test comprises a panel of biomarkers of liver fibrosis shown to accurately assess fibrosis and...
predict clinical outcomes in a range of chronic liver diseases. This is the first study of performance of ELF in patients with chronic hepatitis B (CHB) using a single aetiology cohort, and we compare its performance with an alternative method of assessing fibrosis, transient elastography (TE).

**Aim**
We aimed to compare the performance of ELF with transient elastography (TE) in a cohort of patients with CHB, in the identification of liver fibrosis using liver biopsy as the reference standard.

**Method**
188 patients with CHB were recruited consecutively at a single Italian centre. TE, serum sampling and liver biopsy were performed on the same day. ELF tests were performed in one batch at a central laboratory using thawed samples previously stored at −20°C. Biopsies were assessed by one pathologist using the Ishak staging system. Diagnostic performance of ELF and TE for detection of histological stages of liver fibrosis was assessed and area under receiver operator characteristic curves (AUROC) calculated. Only those in whom TE was successfully performed were included.

Different fibrosis levels were assessed, from any fibrosis (0 vs 1–6) to cirrhosis (0–4 vs 5, 6 and 0–5 vs 6).

**Results**
Patients were treatment-naive, median age was 47 years. 78% were e-antigen negative. Biopsies reported mild/moderate fibrosis (Ishak 0–1) in 21%, moderate fibrosis (2–3) 41% and severe fibrosis/ cirrhosis (4–6) 38%. ELF and TE demonstrated good performance in identifying fibrosis (Abstract P23 table 1—representative fibrosis stages are shown, further data available). Both modalities showed similar performance in identifying any fibrosis and minimal fibrosis, with TE performing better in identifying moderate and severe fibrosis, and cirrhosis.

**Conclusion**
In untreated patients with CHB with moderate and severe fibrosis or cirrhosis, TE correlated more closely with histological staging than ELF. The relatively modest performance of ELF in detecting severe fibrosis compared to previous studies may be attributable to disease aetiology or prolonged sample storage at −20°C. Further validation of TE and ELF in CHB should include analysis at the time of sampling and evaluation of the prognostic performance for clinical outcomes as well as histology.