

behaviour.<sup>2</sup> A custodial sentence provides a unique opportunity to focus on hard to reach patients, providing the possibility of testing, diagnosis and treatment of the disease.

**Methods** An online questionnaire was made available to nursing staff currently working for the Scottish Prison Service (SPS). A questionnaire was also given to prisoners currently incarcerated in Scottish Prisons. The data gathered was compiled to evaluate the need for a standardised care pathway for HCV in the SPS.

**Results** Almost half of prisoners considered themselves to be at risk of HCV. Seventeen per cent of prisoners who did not consider themselves to be at risk had shared needles and/or other injecting paraphernalia. Eighty-eight per cent of blood borne virus nurses thought it would be of benefit if the prisoner did not move prison whilst receiving HCV treatment.

Forty seven per cent of prisoners considered themselves to be at risk of Hepatitis C and 2% were unsure of their potential risk. Twentyseven per cent of prisoners who do not consider themselves to be at risk have used intravenous drugs, 10.6% have shared needles and a further 6% have shared other injecting paraphernalia. Eightytwo per cent of the people who considered themselves to be at risk, or were unsure of their potential risk have been offered a test and 74% have been tested. Seventy per cent of the group that have been tested were tested in prison. Fifty seven per cent tested positive. Eightyeight per cent of blood borne virus nurses thought it would be of benefit to the treatment of Hepatitis C if the prisoner did not move prison whilst receiving treatment.

**Conclusion** A clear majority of the nurses thought that a standardised transfer form would be of benefit to patient care. As a result of this finding a standardised transfer form is in the process of being designed. The secondary outcome measures proved most interesting. Many prisoners claimed to have been vaccinated against Hepatitis C, indicating their lack of understanding of the virus. Further research is needed into improving education for the high risk population.

A lack of awareness of HCV amongst prisoners was identified, making further education crucial to achieving satisfactory health promotion and disease prevention. This study also concludes that a standardised transfer form would be of benefit to patient care. Further research is needed into improving education for the high risk population.

**Disclosure of Interest** None Declared.

## REFERENCES

- Hepatitis C Action Plan for Scotland:Phase II:May 2008-March 2011
- Scottish Prison Service. 11th Prisoner Survey 2007. SPS Edinburgh

## PWE-142 DOES THE PRE-BONE MINERAL DENSITY FRAX SCORE PREDICT FRACTURE RISK IN PATIENTS WITH CIRRHOSIS?

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**Introduction** Cirrhosis is an independent risk factor for osteoporosis, with risk of morbidity through fragility fractures. BSG guidelines recommend that all patients with cirrhosis should be offered DEXA scans to measure bone mineral density (BMD), and receive appropriate treatment. The FRAX score is a widely used internet-based algorithm that predicts fracture risk, which can be calculated with or without BMD data. The aim of this study was to determine if the FRAX score without BMD is effective in predicting fracture risk in patients with cirrhosis to potentially reduce the need for BMD testing.

**Methods** Between Nov 11 and Jan 12 consecutive patients with cirrhosis who were reviewed in 3 sub-specialist liver clinics (ALD, NASH and HCV) at the Freeman Hospital were included. Clinical

and demographic patient information was collected retrospectively. FRAX scores were calculated with and without BMD data.

**Results** 146 patients (46 NASH, 50 ALD and 50 HCV) were studied (mean age 59±12, 68% male, mean BMI 30±6). 91 patients had BMD assessed (9 [10%] were osteoporotic and 43 [47%] were osteopenic at the spine and/or hip). 10 (6.8%) had a previous osteoporotic fracture. The pre-BMD FRAX score categorised fracture risk as high in no patients, intermediate in 26 (18%) and low in 120 (82%). Overall, 11 (18%) were categorised as high risk with the post-BMD FRAX. 9 patients (10%) moved from a low risk with pre-BMD FRAX to a high risk with post BMD FRAX. In addition 2 (3%) moved from intermediate to high with post-BMD FRAX. Only 5 of 9 (55%) of patients with osteoporosis on BMD were classified as high risk with post BMD FRAX score. There were no significant differences in fracture risk or BMD between patients with ALD, NASH or HCV.

**Conclusion** The pre-BMD FRAX score underestimates fracture risk in patients with cirrhosis. Therefore, assessment of BMD should continue to form part of the assessment of fracture risk in patients with cirrhosis. As the post-BMD FRAX score includes other risk factors for fracture in addition to bone density it might be the most appropriate to determine which patients require treatment to prevent fractures.

**Disclosure of Interest** None Declared.

## PWE-143 SEQUENTIAL ORAL ANTI-VIRAL THERAPY FOLLOWING PEGYLATED-INTERFERON-ALPHA FAILURE SIGNIFICANTLY INCREASES HBSAG DECLINE

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**Introduction** Tenofovir and Entecavir are potent oral antivirals (OAV's) and leading agents in the treatment of Chronic Hepatitis B (CHB). Despite this, they have limited ability to reduce HBsAg, thus indefinite or life-long therapy is mandated as these drugs rarely achieve immunological control. Pegylated-Interferon-Alpha (PEG-IFN $\alpha$ ) is associated with better rates of HBsAg decline, but only a minority of patients achieve sustained immune control. New strategies to reduce HBsAg and achieve immune control, including combination PEG-IFN $\alpha$  & OAV are under investigation at present. Here we report data on treatment response in a cohort receiving sequential OAV therapy following PEG-IFN $\alpha$  failure.

**Methods** 55 patients (male = 41), median age 31 (range 18–55) were treated with PEG-IFN $\alpha$  over the course of the study. 13 patients remain on therapy and 5 patients discontinued due to poor response or intolerance. 37 patients, HBeAg positive (n = 29), completed 48 weeks PEG-IFN $\alpha$  and were included in the analysis. 23/37 patients (HBeAg positive = 18), following treatment with PEG-IFN $\alpha$  were considered non-responders and treated with sequential OAV therapy. Treatment response in this cohort was compared with 60 patients, (male = 54), median age 45 (range 21–70) receiving OAV monotherapy over a 12-month period. Serum ALT, HBV DNA and HBsAg were quantified at baseline and longitudinally in both cohorts.

**Results** In the sequential therapy group, baseline median ALT was 60 IU/L (range 31–194) and median HBV DNA 5.15 logIU/ml compared with 43 IU/L and 3.43 logIU/ml respectively for the OAV monotherapy group. ALT normalisation and reduction in HBV DNA to undetectable levels was similar in both groups over follow-up (p = n.s). Following 12-months of OAV monotherapy the decline in HBsAg in this group overall was 0.06 logIU/ml compared to baseline (p = n.s). In patients receiving sequential OAV therapy there was a significant decline in HBsAg over follow-up compared to baseline (0.65 log IU/ml, p = 0.0001). In addition 4/18 HBeAg positive patients seroconverted on sequential therapy and 1 patient cleared HBsAg.