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Non-invasive markers of liver fibrosis**THE UTILITY OF FIBROELASTOGRAPHY TO DETECT ALCOHOL-RELATED LIVER DISEASE IN A NURSE-LED OUTPATIENT ALCOHOL TREATMENT CLINIC**Lynn Owens*^{1,2}, Andrew Thompson¹, Kevin Mannix², Elaine Lewis², Gill O'Hare², Laura Richardson², Paul Richardson²¹Wolfson Centre for Personalised Medicine, UNIVERSITY OF LIVERPOOL, ²Hepatology, Royal Liverpool & Broadgreen University Hospital Trust, Liverpool, United KingdomCorresponding author's email: lynno@liv.ac.uk

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Background and Aims: In the last 10yrs the UK has experienced a 62% increase in liver disease with 1/3 of all deaths from liver disease attributed to alcohol. It is Important to highlight that all of these deaths are preventable. However, alcohol-related liver disease (ALD) is often not diagnosed until damage is irreversible. Therefore, we need to develop systems of care that increase the detection of ALD at the earliest stages. We suggest that fibroelastography may be a useful tool in a nurse-led outpatient Alcohol Treatment Clinic (ATC), to maximise early detection of ALD in a high risk population and affording opportunities to intervene and prevent subsequent mortality and death. **Aim:** To determine the clinical utility of performing fibroelastography in an ATC to identify the presence of liver fibrosis.

Methods: An observational prospective clinical audit was performed. Primary outcome measures were; the number of individuals where fibrosis was detected in the a) absence of abnormal liver biochemistry, b) presence of abnormal liver biochemistry defined as a raised ALT or GGT $\geq 3x$ normal. **Setting:** Acute hospital nurse-led outpatient Alcohol Treatment Clinic. **Participants:** 296 patients with alcohol-use disorders and no previous history of cirrhosis.

Results: Of the 296 patients; 136 female; 160 male; with a mean age of 47 years (SD = 10). Median alcohol consumption was 24 units per day (IQR = 15). Eightynine (30.1%) patients showed no evidence for abnormal liver biochemistry of these 55 (61.8%) had no evidence of fibrosis ($<6.5kpa$), 17 (19.1%) showed F1/2 fibrosis ($\geq 6.5 <11kpa$), 17 (19.1%) showed F3/4 fibrosis ($\geq 11kpa$) meeting criteria for referral to hepatology. In total 34 (38.2%) patients had an abnormal fibroscan with no significant liver biochemistry. Twohundred and seven (69.9%) patients had abnormal liver biochemistry of which 72 (34.7%) had no evidence of fibrosis ($<6.5kpa$), 51 (24.6) showed F1/2 fibrosis ($\geq 6.5 <11kpa$) and 84 (40.5%) showed F3/4 fibrosis ($\geq 11kpa$) meeting criteria for referral to hepatology.

Conclusions: Nurse-led ATC setting is a valuable and effective setting for the early detection of ALD utilising fibroelastography. The procedure is quick and patients value the addition of an objective measure for comparisons over time. Most important is that significant fibrosis was detected in over one third of patients who might not otherwise have been identified until much later in the natural history of liver damage and failure.

Disclosure of Interest: None Declared