

Stable rates of cirrhosis diagnosed by Fibroscan despite changing trends in liver disease epidemiology with decreased viral hepatitis: a single centre retrospective cohort study

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Background/Approach: Data for cirrhosis prevalence in Australia are urgently needed to plan health resourcing for hepatocellular carcinoma (HCC) surveillance and liver disease prevention programs.

This retrospective cohort study was conducted at St Vincent's Hospital Melbourne to describe the prevalence of cirrhosis diagnosed by Fibroscan, determine changing trends of aetiology and linkage to specialist care. Raw Fibroscan data files were extracted from three machines used in hospital and community sites, and Fibroscan database. Cirrhosis was defined by aetiology specific cutoffs and ≥ 12.5 kPa where aetiology was unavailable. Individuals with cirrhosis range Fibroscans were cross referenced with hospital record data to describe proportions of patients linked to specialist care. Proportions of Fibroscans in cirrhotic range and aetiologies compared with Chi square test.

Outcome/Results: 10,622 Fibroscans were performed in 8727 individuals from 9 April 2010 to 27 April 2021. Most recorded liver disease aetiologies: 38% chronic hepatitis C (3358/8798), 25% hepatitis B (2231/8798), 15% fatty liver disease (1297/8798) and 10% alcohol (837/8798).

15% (1595/10622) of Fibroscan records were cirrhosis range: the proportions were similar over time, ranging between 15-19% without significant variation ($p=0.68$). Proportion of cirrhosis range Fibroscans showed significant downtrend with chronic hepatitis C ($p=0.018$) and chronic hepatitis B ($p=0.012$), compared to an uptrend with fatty liver disease ($p=0.35$) and alcohol ($p=0.009$).

1045 individuals with cirrhotic range Fibroscans had hospital records: 56% (584/1045) were known to the liver clinic at the time of Fibroscan, 20% (205/1045) referred following Fibroscan and 24% (252/1045) had no referral.

Conclusions/Applications: The proportion of patients with cirrhosis diagnosed by Fibroscan has remained stable over time, with changing trends of chronic liver disease aetiology from viral hepatitis to fatty liver disease and alcohol related liver disease. However, linkage to specialist care remains suboptimal. These data suggest greater resourcing to streamline linkage of people diagnosed with cirrhosis by Fibroscan into specialist care is warranted.

Disclosure of Interest Statement: No disclosures