A Clinical Audit of FibroScan Utilisation in Hepatitis B Patients: Trends, Management, and Outcomes

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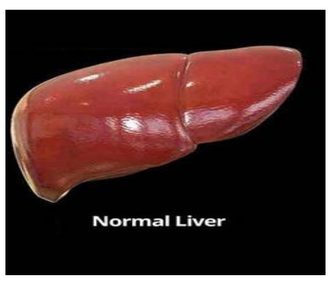
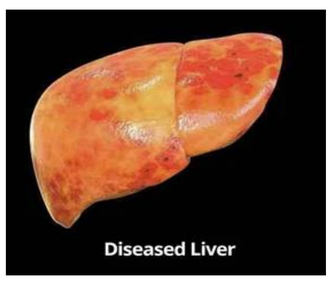
1 Background

Chronic hepatitis B (CHB) infection carries a risk of liver fibrosis, cirrhosis and hepatocellular carcinoma. FibroScan is a non-invasive means of monitoring of fibrosis progression and providing prognostic information in those with CHB infection. The European Association for the Study of the Liver guidelines recommend non-invasive fibrosis assessment using FibroScan in combination with serum biomarkers for staging liver disease and guiding treatment decisions.





Aim

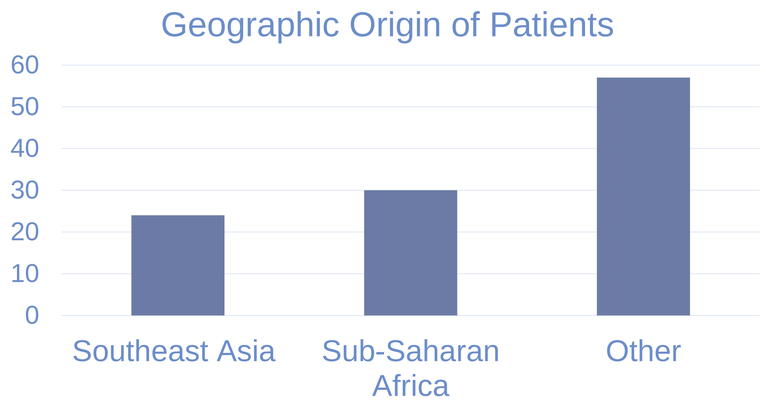
To evaluate the incidence of FibroScan utilisation and consequential impact on management decisions in Cork University Hospital (CUH) CHB cohort.

2 Methods

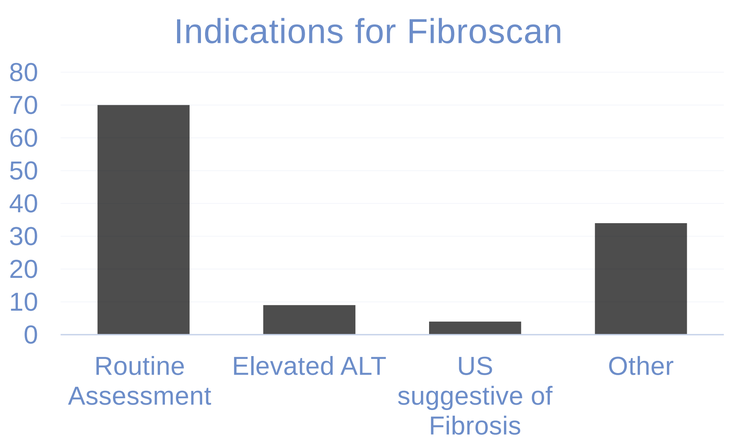
All patients with CHB who received FibroScan between January 2022 to January 2023 were included in the study. Data was extracted from the patients' medical records. Data was analysed using descriptive statistics via SPSS software.

3 Results

A total of 117 patients with CHB infection received FibroScan in CUH between January 2022 and January 2023, 62% of which were male, with a mean age of 43 years (range 20 to 71 years).



Mean CAP score was 228 and 37.6% (n=44) of patients had a CAP score suggestive of hepatic steatosis.



Of these patients referred for liver biopsy, two of these patients had a normal FibroScan (3.32kPa/235CAP 4.5kpa/CAP 125), the third had a Fibroscan suggestive of cirrhosis (17.5kPa/CAP 218). Of those who initiated antiviral treatment following Fibroscan, fibrosis scores ranged from 4.9 - 10.5kPa.

5 Conclusion

Fibroscan was effectively utilised as an alternative to liver biopsy in patients with chronic hepatitis B for staging purposes and to guide treatment decisions, particularly regarding antiviral therapy, surveillance, and lifestyle interventions. A significant proportion of patients in this audit had an abnormal fibroscan indicating potential fibrosis or cirrhosis. However, only a small proportion of patients had their management changed post FibroScan, suggesting that this alone was not the primary determinant of treatment decisions. In contrast, patients with reassuring FibroScan results also had management changes post fibroscan, likely influenced by biochemical markers (ALT, viral load) and other clinical factors.

Results of FibroScan, in conjunction with biochemical test results, remains a useful non-invasive tool for facilitating decisions regarding surveillance and antiviral treatment in cases of chronic hepatitis B.

6 References

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