

Nurse led Utilisation of Fibroscan in a Viral Hepatitis Clinic

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Background

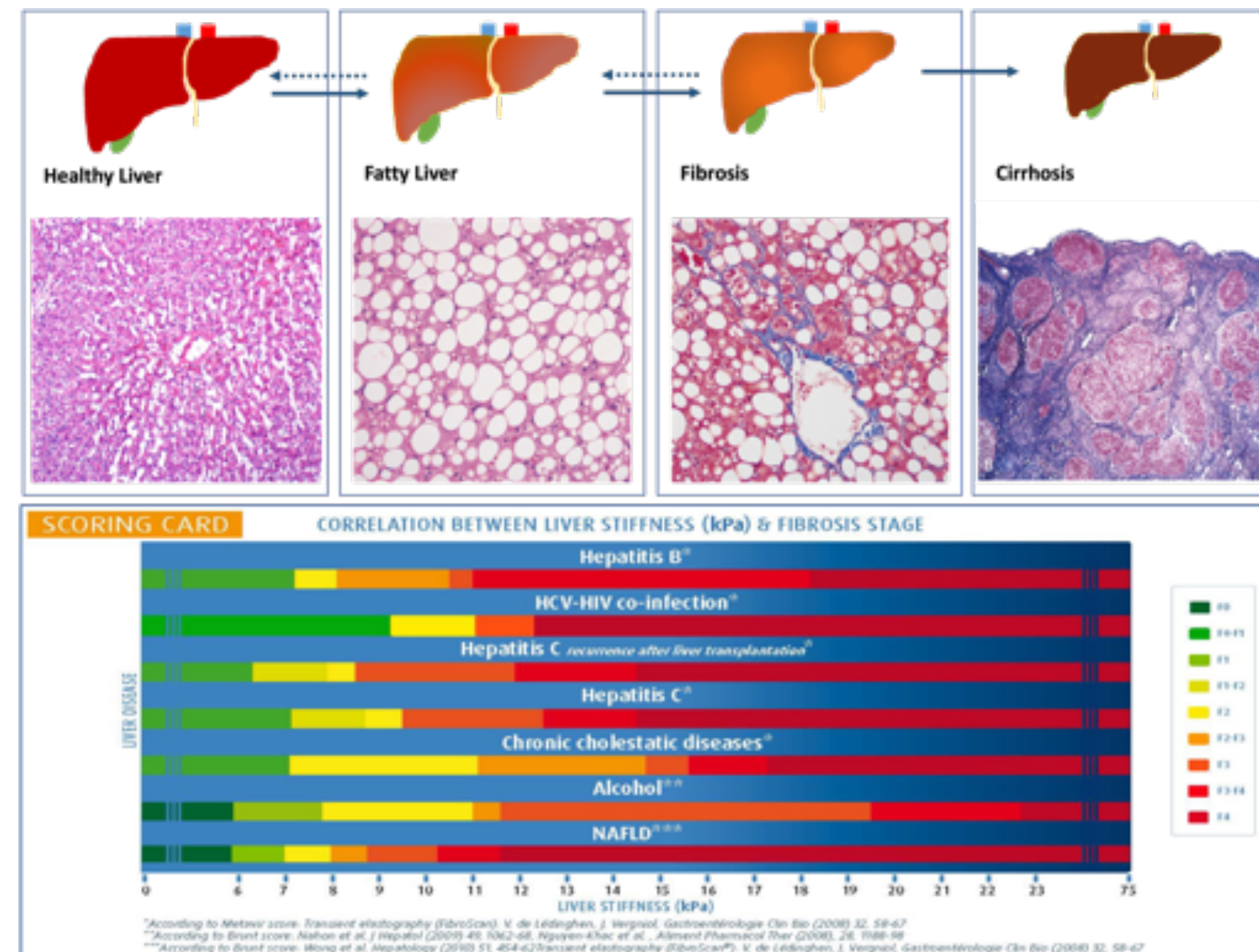
A Fibroscan is a convenient non-invasive tool for quantification of Liver Stiffness (KPA) and fat component (CAP). It has many advantages including short procedure time, fast results, safety and it's easily taught and learned.

Viral hepatitis and specifically chronic HBV infection requires specialist input and lifelong monitoring. Consequently, staging liver disease is essential in disease management. One of the main prognostic factors to consider when reviewing a patient with liver disease is the degree of liver fibrosis, which correlates with the risk of development of cirrhosis and consequently HCC.

Here we present our nurse led Fibroscan service in comparison to conventional modalities in the management of liver disease.

Methods

106 patients were referred to the Nurse-led Fibroscan service from January 2022 to December 2022. The Fibroscan readings were then compared to the Ultrasound scan (USS) and biochemistry results. Of the 105 patients with a viral hepatitis diagnosis, 67 also had US. The average ALT was 37.



Number	106			
Male	74%			
Female	26%			
Aetiology				
Hepatitis B	79 (74.5%)			
Hepatitis C	25 (23.6%)			
No evidence of viral hepatitis	1 (0.01%)			
	Ultrasound results	Fibroscan results	Variance (%)	
Normal	33	Normal	29	12%
		Fatty Liver	2	
		Fibrosis	2	
Fatty Liver	16	Normal	4	31.25%
		Fatty Liver	11	
		Fibrosis	1	
Fibrosis/Cirrhosis	17	Normal	8	76%
		Fatty Liver	5	
		Cirrhosis	3	

Fibroscan results demonstrated normal=79, Fatty liver=13, fibrosis=6 and cirrhosis =7. These results were then compared to the ultrasounds.

Results

Of the 33 who had a normal ultrasound, 2 had fatty liver and 2 had evidence of fibrosis on Fibroscan showing a 12% (n=4) variance of diagnosis indicating a worsening stage of liver disease. Of the 16 patients who had fatty liver on ultrasound, 11 had fatty liver on Fibroscan; there was a variance of 31.25% (n=5) with 4 showing a better diagnosis having a normal Fibroscan and 1 subject showing fibrosis indicating a worse prognosis. 17 had fibrosis or early cirrhosis reported on ultrasound, 8 were reported as normal on Fibroscan, 5 reported as fatty liver, 1 fibrosis and 3 cirrhosis indicating the variance to be 76% (n=13) towards a more favourable prognosis.

Conclusion

A Nurse led Fibroscan service highlights the increasing role and broader scope of practice that nurses play in viral hepatitis management. Fibroscan allows risk stratification within the viral hepatitis cohort, in combination with serology and biochemistry to streamline patients into Nurse-led follow-up, doctor review and further allows timely referral to hepatology services for those at higher risk for development of hepatocellular carcinoma.

References

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