Detecting the silent epidemic of fatty liver disease

How are you following up with your at-risk patients?

FibroScan®
Within your practice, you may have patients at increased risk of developing liver disease. How can you play a critical role in slowing disease progression through early detection?

There are 3 main chronic liver diseases:

- Viral Hepatitis
  - HCV
  - HBV
- Alcoholic liver disease
- NAFLD/NASH

Currently, there is a silent epidemic of NAFLD among at-risk patients with Type 2 diabetes, obesity and high cholesterol.\(^1\)

In the majority of patients, NAFLD is associated with metabolic syndrome.\(^2,3\)

If patients with NAFLD remain undiagnosed and untreated, they may go on to develop NASH and, ultimately, liver cirrhosis.\(^1\)

Both steatosis and fibrosis can be evaluated by non-invasive methods that may lead to earlier diagnosis, treatment and follow-up.\(^3\)

**What is NAFLD?**

NAFLD is characterized by the accumulation of excess fat in liver cells that is not caused by alcohol use. NASH, the more severe form of NAFLD, is characterized by the presence of steatosis, lobular inflammation, and hepatocellular ballooning.\(^1,3\)
Progression of liver damage in NAFLD

Healthy liver → Reversible Fatty liver (NAFLD) → Reversible NASH (Steatosis + Inflammation + Ballooning) → Reversible NASH with fibrosis → Irreversible NASH with cirrhosis
Diagnosing NAFLD can be challenging because most patients are asymptomatic and are only identified by routine blood tests that show elevated liver enzymes.¹

Moreover, a subset of patients can have advanced liver lesions but normal liver enzymes and therefore remain undiagnosed and untreated.¹

If detected and managed at an early stage, it is possible to stop NAFLD from progressing and help at-risk patients reduce the amount of fat in their liver.² Diet and exercise are the mainstay of management in patients with NAFLD.¹

International Clinical Practice Guidelines now recommend that screening for NAFLD should be part of routine work-up in patients with type 2 diabetes, obesity and metabolic syndrome.⁵

Risk factors and predictors of NAFLD ¹

- Type 2 diabetes
- Overweight and obesity
- High cholesterol
- High blood pressure
- High triglycerides

Key NAFLD data: ⁶,⁷,⁸

- 25% of the global population have NAFLD
- 73% of Type 2 diabetes patients have NAFLD
- 18% of Type 2 diabetes patients have advanced fibrosis or cirrhosis
**FibroScan®: diagnose and monitor your at-risk patients**

**What is FibroScan®?**

FibroScan® is the non-invasive gold standard solution for comprehensive management of liver health.

**How does FibroScan® work?**

FibroScan® uses the pioneer and unique Vibration Controlled Transient Elastography technology (VCTE™). By placing the probe in patient rib spaces, it sends some mechanical waves (shear waves, ultrasound waves) through the liver to compute some liver related quantitative parameters in a simple, quick and non-invasive examination.

- LSM by VCTE™ is unique, patented and validated for liver fibrosis assessment. It is the standard for non-invasive evaluation of liver stiffness.\(^5\)
- CAP™ is unique, patented and validated for liver steatosis assessment.\(^9,10\)

**What makes FibroScan® unique?**

- **Fast - Intuitive - Best-in-class - Reliable - Original**
- Tried and trusted: 20-year market presence
- Supported by 2500+ peer-reviewed publications
- Recommended by 70+ international guidelines

LSM: Liver stiffness measurement
A simple referral pathway for your at-risk patients

FIB-4 (Free fibrosis blood score)

- **Low risk cut-off**
  - FIB-4 < 1.30
  - Management and follow up in Primary care

- **Indeterminate risk**
  - 1.30 < FIB-4 < 3.25
  - Consider referring to hepatology

- **High risk**
  - FIB-4 > 3.25
  - Refer to hepatology

**FibroScan®**

- **< 8 kPa**
  - Below referral threshold
  - Give lifestyle advice (alcohol, diet and weight);
    - If scan below 8 kPa, rescan after 5 years;
    - If above 8 kPa, rescan after 3 years.

- **8-14.99 kPa**
  - Consider referring to hepatology

- **> 15 kPa**
  - Refer to hepatology

Adapted from Chivinge A, Nottingham University Hospital NHS Trust and Crossan C, et al. Liver International. 2019; 38; 2052-2060. FIB-4 free calculator available on https://www.hepatitisc.uw.edu/page/clinical-calculators/fib-4
Recommended by 70+ international guidelines


“Screening of liver fibrosis for NAFLD patients is recommended, particularly among patients with metabolic syndrome or type 2 diabetes mellitus who have higher risk of liver fibrosis”

NICE 2020 guidelines recommend using FibroScan® in primary care practice:

“Using FibroScan® instead of liver biopsy is likely to be resource releasing as it is quicker, non-invasive and the procedure cost is cheaper. Using the technology in Primary Care centres could be resource releasing, if it means fewer hospital visits and reduces waiting times at Secondary Care centres”

ADA Guidelines 2019

“In patients with type 2 diabetes or pre-diabetes, non-invasive tests, such as elastography or fibrosis biomarkers, may be used to assess risk of fibrosis, but referral to a liver specialist and liver biopsy may be required for a definitive diagnosis”
Don’t let your at-risk patients go undiagnosed

Find out more about FibroScan® at echosens.com.

Bibliography:

Products in the FibroScan® range are Class IIa medical devices as defined by Directive 93/42/EEC (EC 0459). These devices are designed for use in a medical practice in order to measure liver stiffness and ultrasound attenuation in patients with liver disease. Examinations with FibroScan® device shall be performed by an operator who has been certified by the manufacturer or its approved local representative. Operators are expressly recommended to carefully read the instructions given in the user manual and on the labelling of these products. Check cost defrayal conditions with paying bodies. FibroScan® is registered trademark of Echosens. This marketing material is not intended for US audience. © Copyright Echosens - All rights reserved - Brochure NAFLD v1 0221.