Customer Case Study

Enhanced liver fibrosis patient management for those at risk of complications

Dijon Hospital's endocrinology department adopted the ELF Test and improved liver disease care for type 2 diabetes patients

Dijon University Hospital

Dijon, France

Dept. of Endocrinology, Diabetology, Metabolic Diseases and Nutrition

- The department has a capacity of 46 inpatient beds and 10 outpatient hospital beds (HDJ).
- It is dedicated to the treatment of metabolic diseases, diabetology, and endocrinology.
- The medical team consists of 4 University Professor Hospital Practitioners (PUPH) and 6 Hospital Practitioners (PH).

Biochemistry Laboratory

The laboratory conducts STAT, routine, and specialty testing for major diseases and conditions, including cardiovascular diseases, liver function, blood gases, proteins, vitamins, metabolism, hormonology, and newborn screening.

Key figures:
- 40 million tests/year (+newborn screening)
- 12 biologists and 38 lab technicians
- 2 Atellica IM and 3 Atellica CH Analyzers

Challenges

Given the high prevalence of NAFLD/MASLD among Type 2 diabetes (T2D) patients, the challenge for endocrinologists is to identify those at risk of developing liver complications.[1]

Performance of Vibration-Controlled Transient Elastography (VCTE) in diagnosing and staging fibrosis is superior to that of simple blood scores (FIB-4, NFS). However, VCTE is not widely available, especially in non-hepatology settings.[1-3]

Risks

- Missing T2D patients seen in the endocrinology department who suffer from advanced liver fibrosis or cirrhosis.
- The limited performance of simple blood marker scores when used alone might lead to unnecessary referrals to the Hepatology clinic for VCTE measurements.

Solution: Enhanced Liver Fibrosis (ELF) Test

- The Enhanced Liver Fibrosis (ELF) test: a non-invasive simple blood test that measures three direct markers of fibrosis.
- ELF is featured in more than 200 peer-reviewed publications and clinical practice guidelines (CPGs).
- Recent CPGs recommend performing ELF test after simple blood scores (FIB-4) when VCTE isn't available.[1-3]
- Fully automated: ELF test is calculated and reported by the Atellica IM Analyzer.

↗ siemens-healthineers.com/benefits-of-elf-test

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The adoption of ELF test at Dijon University Hospital improved liver disease care for T2D patients

Outcomes

- Since February 2024, the biochemistry laboratory performs ELF test for FIB-4 results above 1.3
- ELF patients' results are then reviewed during monthly clinical multidisciplinary consultation meetings (RCPs), aiding in making decisions that enable patients receive the best possible care.

1 Management of T2D patients as per recent endocrinology CPGs for chronic liver disease

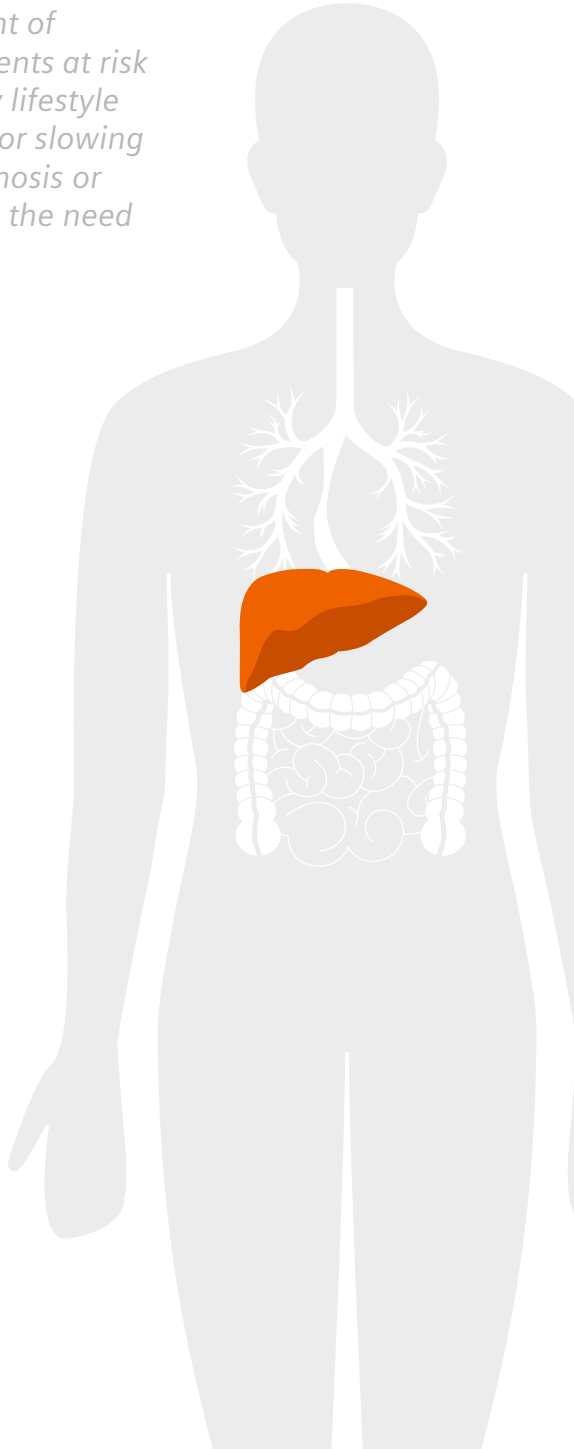
2 Enhanced care pathway for chronic liver diseases

"We anticipated that ELF test would enhance the management of patients with liver fibrosis in our hospital. By identifying patients at risk of developing liver complications, we can recommend timely lifestyle modifications and provide dietary advice, which are crucial for slowing or reversing disease progression and reducing the risk of cirrhosis or hepatocarcinoma. Additionally, ELF test could help minimize the need for invasive procedures such as liver biopsies."

Prof. Jean- Michel Petit
Dept. of Endocrinology, Diabetology, Metabolic Diseases and Nutrition, Dijon Bourgogne University Hospital

"We knew the crucial role that clinical laboratories play in detecting advanced liver fibrosis by performing the calculation of the FIB-4 index. Therefore, it was with great pleasure that we collaborated with the endocrinology department to implement ELF test, enhancing the accuracy of our testing pathway, particularly for patients with an intermediate FIB-4 index."

Prof. Laurence Duvillard and Dr. Damien Leleu
Biochemistry Laboratory,
Dijon Bourgogne University Hospital



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2. AASLD Practice Guidance on the clinical assessment and management of nonalcoholic fatty liver disease. Hepatology 2023 May 1;77(5):1797-1835. doi: 10.1097/HEP.0000000000000323.
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