

Declaration of interests

None

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

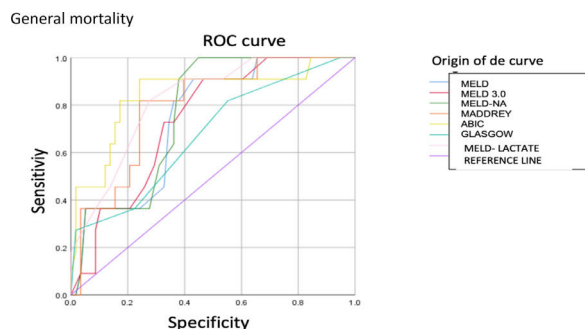
General mortality

Figure 1. Sensitivity and specificity of scales used in alcoholic hepatitis to predict mortality.

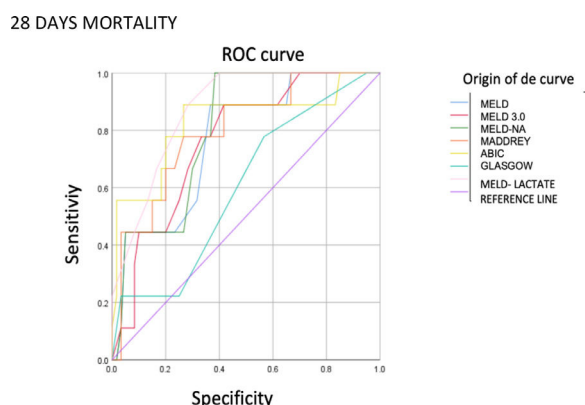
28 DAYS MORTALITY

Figure 2. Sensitivity and specificity to predict 28 days mortality.

<https://doi.org/10.1016/j.aohep.2024.101451>

Comparison of non-invasive scores for the evaluation of liver fibrosis in subjects with metabolic dysfunction-associated fatty liver disease (MAFLD)

Bryan A. Priego-Parra^{1,2}, Arturo Triana-Romero³, Raúl Bernal-Reyes⁴, María E. Icaza-Chávez⁴, Sophia E. Martínez-Vázquez⁴, Ana D. Cano-Contreras², Héctor Vivanco-Cid², José M. Remes-Troche²

¹ Centro de Investigaciones Biomédicas, Universidad Veracruzana

² Instituto de Investigaciones Médico-Biológicas, Universidad Veracruzana

³ Unidad Médica de Alta Especialidad (UMAE) Hospital de Especialidades "Dr. Bernardo Sepúlveda Gutiérrez", Centro Médico Nacional Siglo XXI

⁴ Grupo de Investigación MAFLD de la Asociación Mexicana de Gastroenterología

Introduction and Objectives: Metabolic-associated fatty liver disease (MAFLD) poses a significant risk for progression to advanced liver diseases, underscoring the need for early detection. This study aims to assess and compare the diagnostic efficacy of non-invasive markers (APRI, FIB-4, Hepamet, and NAFLD Score (NFS)) in detecting hepatic fibrosis among MAFLD patients.

Materials and Patients: A retrospective examination was performed on adults with MAFLD who had undergone transient liver elastography. Hepatic fibrosis was identified at a cut-off point of ≥ 8 kPa. APRI, FIB-4, Hepamet, and NFS scores were evaluated with cut-off points determined via the Youden index. Receiver Operating Characteristic (ROC) curves and their areas were computed. All participants provided informed consent.

Results: Our cohort consisted of 150 MAFLD patients, the median age of 55 years (48-65), comprising 66.2% (129) females and 33.88% (66) males. The median BMI was 32.1 (28.8-35.6), kPa was 5.6 (4.6-7.8), and CAP was 310 (280-341). Hepatic fibrosis was evident in 24.7% (37) of the participants. Among the evaluated scores, APRI exhibited superior diagnostic performance, achieving an area under the curve of 0.72, followed by FIB-4 (0.66), Hepamet (0.64), and NFS (0.62). The cut-off points of 0.50 for APRI, 1.65 for FIB-4, 0.05 for Hepamet, and -0.75 for NFS yielded sensitivities of 86%, 82%, 86%, and 81%, respectively (Fig 1).

Conclusions: Non-invasive scoring systems, notably APRI, demonstrate valuable potential in evaluating hepatic fibrosis among Mexican MAFLD patients. Utilization of adjusted cut-off points enhances test efficiency, thereby facilitating early detection of individuals at greater risk of disease progression.

Ethical statement

The protocol was registered and approved by the Ethics Committee. The identity of the patients is protected. Consentment was obtained.

Declaration of interests

None

Funding

This research was supported by CONAHCYT grant CVU 1138232 and Proyecto de Ciencia Básica #256235

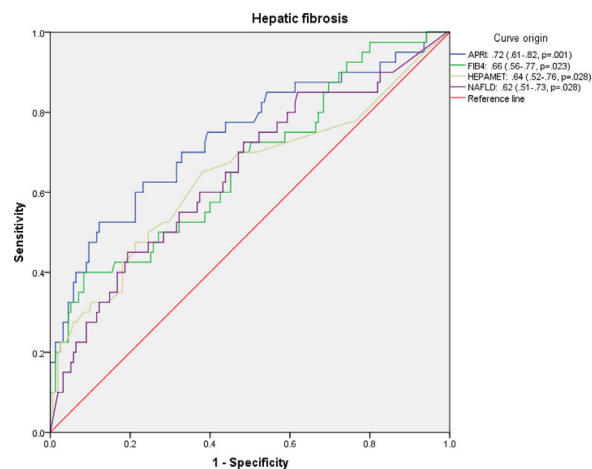


Figure 1. Receiver operating characteristic (ROC) curves were constructed to evaluate the diagnostic performance of different non-invasive scores for hepatic fibrosis in subjects with metabolic-associated fatty liver disease (MAFLD). Hepatic fibrosis was assessed using liver transient elastography, with a threshold of ≥ 8 kPa indicating the presence of fibrosis.

<https://doi.org/10.1016/j.aohep.2024.101452>