

Prevalence of high-risk metabolic dysfunction-associated fatty liver disease (MASH) according to the FAST® index in a group of diabetic patients

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**Introduction and Objectives:** Diabetes is a high-risk condition for the progression of metabolic-associated fatty liver disease (MASLD). The FAST index combines the FibroScan® and AST to predict the risk of high-risk metabolic dysfunction-associated steatohepatitis (MASH). Objective: determine the proportion of diabetic patients at high risk of MASH according to the FAST index.

**Materials and Patients:** Observational, cross-sectional study to estimate prevalence. Diabetic patients who agreed to undergo FibroScan® and liver biochemistry profile were included. The FAST® index was calculated (<0.35 no risk; 0.35 to 0.67 indeterminate; ≥ 0.67 high-risk NASH). Descriptive statistics were used, and a correlation matrix was performed using Pearson's test, with a p value < 0.05 considered significant.

**Results:** 298 patients were evaluated, 195 (64.5%) women, mean age 55.6±10.8 years, of whom 284 (95.3%) agreed to undergo FibroScan® study, 109 (38.4%) presented steatosis: S1 in 34 (12%), S2 in 33 (11.6%) and S3 in 42 (14.8%). 155 (56.4%) had fibrosis: F1 in 42 (14.8%), F2 in 40 (14.1%), F3 in 26 (9.2%) and F4 in 47 (16.5%). 261 (87.6%) patients had recent determination of aminotransferases; according to the FAST® index: without risk= 200 (76.6%), indeterminate= 31 (11.9%), and with high risk= 30 (11.5%). There was a strongly positive correlation between a higher FAST index and a higher probability of having a higher degree of fibrosis (r=0.702, p<0.0001). The correlation matrix is shown in Table 1

**Conclusions:** The prevalence of MASH is considerable in patients with diabetes; the factors that determine this risk in this population are not yet clear. FAST® appears to be a non-invasive tool for making decisions regarding MASH.

**Ethical Statement:** This study was conducted following the principles and ethical standards of our institution in accordance with the Declaration of Helsinki.

**Declaration of Interests:** None.

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**Table 1**  
Correlation Matrix to Determine the Correlation between FAST® Score and Clinical Characteristics in a Cohort of Diabetic Patients

| Covariate              | Correlation Coefficient | P      |
|------------------------|-------------------------|--------|
| Sex (women)            | 0.161                   | 0.009* |
| Adherence to Treatment | -0.162                  | 0.009* |
| Steatosis Stage        | 0.115                   | 0.063  |
| Fibrosis Stage         | 0.702                   | 0.000* |
| Metabolic Syndrome     | 0.056                   | 0.369  |
| Smoking                | -0.022                  | 0.719  |
| HbA1c (±7)             | 0.124                   | .056   |

\*The correlation is significant with p<0.05

Serum Immunoglobulin M levels and neutrophil/lymphocyte index as predictors of treatment response in patients with primary biliary cholangitis

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**Introduction and Objectives:** Primary biliary cholangitis (PBC) involves chronic inflammation of the bile ducts, with a high risk of progression to cirrhosis in non-responders to treatment. Identifying the relationship between immunoglobulin M (IgM) levels and neutrophil/lymphocyte index as predictors of response to treatment could optimize clinical outcomes.

**Materials and Methods:** A retrospective, longitudinal, analytical, and observational study was conducted that included the review of 71 records of patients diagnosed with PBC. Baseline serum IgM levels were recorded, and the neutrophil/lymphocyte index (NLI) was calculated. Response to treatment with ursodeoxycholic acid (UDCA) at doses of 13-15mg/kg was assessed after one year of follow-up, according to the Barcelona criteria. Subsequently, Pearson's correlation coefficient was determined to identify the relationship between the variables.

**Results:** A total of 67 patients diagnosed with PBC were included. The mean age reported was 55.5 years and the highest frequency was recorded in females, representing 91% of cases. The main comorbidities reported were hypothyroidism (20.8%), systemic sclerosis (11.9%) and Sjögren's syndrome (7.4%). Clinical portal hypertension was identified at diagnosis in 22 patients (32.8%). An adequate response to treatment was observed in 35 patients (52.2%), while 32 (47.8%) did not show a satisfactory response. The mean neutrophil/lymphocyte index value in the response group was 2.3 (range: 0.7-8.6), while in the non-response group, it was 2.5 (range: 0.8-18.5). Additionally, 42 patients (62%) were identified with IgM levels >240mg/dl. Subsequently, a Pearson correlation analysis was performed between IgM and NLI levels with treatment response, yielding a value of 0.04 (p>0.05) and -0.18 (p>0.5), respectively.

**Conclusions:** A considerable percentage of patients presented failure to treatment with UDCA and according to the results, there was no significant association between IGM levels and NLI and therapeutic response.

**Ethical statement:** The study was conducted in accordance with the ethical principles set forth in the Declaration of Helsinki and informed consent was obtained from all participants.

**Declaration of Interests:** None.

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Exploring the diagnostic accuracy of MAFLD, MASLD and metabolic syndrome in individuals with and without steatosis.

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**Introduction and Objectives:** The renaming of non-alcoholic fatty liver disease (NAFLD) to metabolic dysfunction-associated fatty liver disease (MAFLD) and metabolic dysfunction-associated steatotic liver disease (MASLD) marks a crucial milestone in the understanding of this complex disease, recognizing the role of metabolic dysfunction beyond the simple exclusion of excessive alcohol consumption. However, despite these advances, the redefined criteria have generated significant debate around their diagnostic accuracy. This debate centers on several key issues, such as the breadth of the criteria, their applicability in different populations, and the risk of overdiagnosis. The aim of this study is to explore the application of the MAFLD, MASLD and metabolic syndrome criteria in the identification and categorization of individuals with and without hepatic steatosis, with the objective of determining the suitability of both criteria for clinical use.

**Materials and Patients:** A retrospective study was conducted with 600 individuals who attended routine check-ups at Medica Sur Clinic and Foundation, Mexico City, Mexico. Data were collected from clinical evaluations, imaging studies and laboratory tests. The diagnosis of hepatic steatosis was made using vibration-controlled transient elastography. The diagnosis of MAFLD, MASLD and metabolic syndrome was made according to the criteria established for each definition.

**Results:** Among individuals with hepatic steatosis, prevalence rates were 89.4% for MASLD, 81.5% for MAFLD (81.5%), and 32.8% for metabolic syndrome. Interestingly, a higher proportion of individuals without hepatic steatosis met MASLD criteria (53.2%) compared with MAFLD (28.1) and MetS (8.2%) criteria. Sensitivity and specificity analysis revealed a balanced performance of MAFLD, whereas MASLD showed higher sensitivity but lower specificity. Sensitivity and specificity analysis revealed a balanced performance of MAFLD, whereas MASLD showed slightly higher sensitivity but much lower specificity. When assessing the metabolic risk profile, individuals with MAFLD and metabolic syndrome were found to be at higher risk than those with MASLD.

**Conclusions:** MAFLD emerges as a balanced diagnostic framework, offering reliable sensitivity and specificity. Although MASLD exhibits higher sensitivity, its lower specificity

**Ethical statement:** All procedures performed were carried out in accordance with the ethical standards of the Ethics Committee of the Clinica Medica Sur Foundation (protocol code 2021-EXT-552) and with the 1964 Declaration of Helsinki and its subsequent amendments or other comparable ethical standards.

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### Neutrophil/lymphocyte index as a prognostic predictor in patients with primary biliary cholangitis

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**Introduction and Objectives:** There is an inadequate response to first line treatment in 40% of patients with primary biliary cholangitis (PBC). The neutrophil/lymphocyte (N/L) index has been associated with poor long-term prognosis. Our objective was to evaluate the relationship of N/L index with prognosis at 1 year of treatment in patients with PBC.

**Materials and Patients:** This is an observational, retrospective, and analytical study of patients diagnosed with PBC, evaluating the prognosis according to the response to treatment measured by the GLOBE scoring system and its relationship with the N/L index at the time of diagnosis. Qualitative data are expressed as percentages and quantitative data as mean±SD. Statistical comparison was performed with the two-tailed unpaired Student's t-test or chi-square, as appropriate. Alpha=0.005.

**Results:** A total of 128 patients (54.21±10.26 years, 93.8% women) with PBC were included. According to the GLOBE score, 27.3% were classified as "good prognosis" and 72.7% as "poor prognosis". The N/L index was lower in the good prognosis group (2.29±0.99) compared to the poor prognosis group (3.06±1.48, p=0.005), also the Meld-Na scoring system was higher in the poor prognosis group (11.57±4.96 vs. 7.62±1.33, p=0.005). Mortality in the population was 9.4% all belonging to the poor prognosis group.

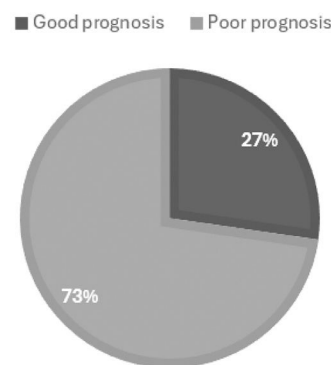
**Conclusions:** The N/L index in patients diagnosed with PBC is related to the prognosis after one year of treatment as measured by the GLOBE score. It is necessary to prospectively assess the findings in order to be able to determine their prognostic utility at the time of diagnosis.

**Ethical statement:** The research was conducted in accordance with the Helsinki Declaration of the World Assembly 2013.

**Declaration of interests:** None.

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### PROGNOSIS IN PATIENTS WITH PRIMARY BILIARY CHOLANGITIS



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### Spontaneous Fungal Peritonitis versus Fungiascites

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