

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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