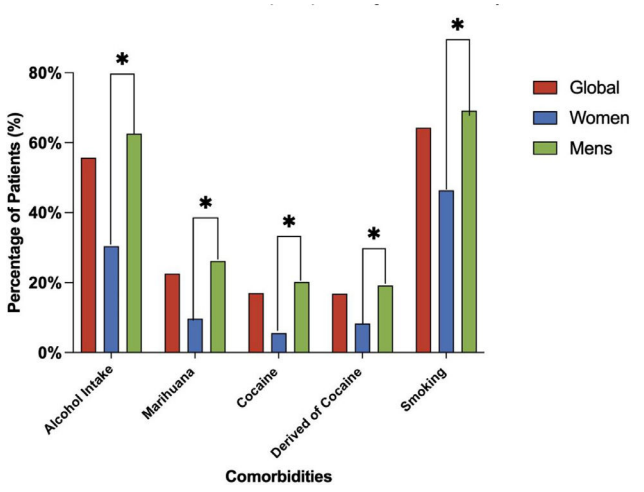
Substance Use and Alcohol intake in People Experiencing Homelessness by Sex.



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#152

BILE ACID PROFILES IN PATIENTS WITH METABOLIC DYSFUNCTION-ASSOCIATED STEATOTIC LIVER DISEASE

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Introduction and Objectives: Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD) is a leading cause of chronic liver disease with rising global prevalence. Bile acids (BAs), beyond their role in lipid digestion, act as key metabolic regulators. Alterations in BA composition have been implicated in MASLD pathogenesis and may serve as biomarkers for disease progression. Previous studies have reported stage-specific changes in BA profiles; however, their association with histological severity remains to be fully elucidated.

Objectives: To assess serum BA concentrations in a liver biopsy-characterized MASLD cohort and to investigate their relationship with histological severity, distinguishing between isolated steatosis and Metabolic Dysfunction-Associated Steatohepatitis (MASH)

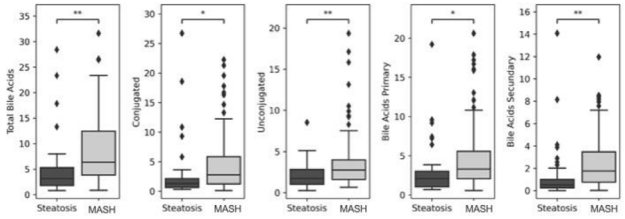
Materials and Methods: A total of 127 patients with MASLD were included, comprising 38 with isolated steatosis and 89 with MASH. Plasma BA levels were quantified using High-Performance Liquid Chromatography (HPLC).

Results: Patients with MASH showed significantly higher total serum BA levels compared to those with steatosis. Eight individual BAs were markedly elevated in the MASH group, including deoxycholic acid, chenodeoxycholic acid, their glycine conjugates, glycocholic acid and its glycine conjugate, as well as ursodeoxycholic acid and its taurine conjugate.

Conclusions: Elevated plasma BA levels in MASH suggest a potential role for BAs as non-invasive markers of disease severity in MASLD. These findings support further investigation into BA profiling as a diagnostic and prognostic tool in the clinical management of MASLD.

Conflict of interest: Yes, This work was partially funded by fondecyt : 1241450

BA steatosis vs MASH



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#153

RISK FACTORS ASSOCIATED WITH ADVANCED LIVER FIBROSIS IN PATIENTS WITH MASLD AT A PRIVATE CLINIC IN PERU

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Introduction and Objectives: Metabolic dysfunction-associated steatotic liver disease (MASLD) is the leading cause of chronic liver disease worldwide. In South America, its prevalence reaches 35.7% in the general population and up to 68% among individuals with risk factors such as obesity or diabetes mellitus. Identifying factors associated with advanced fibrosis enables early detection and improved clinical management. This study aimed to evaluate clinical factors associated with advanced fibrosis in patients with MASLD.

Materials and Methods: A cross-sectional observational study of 181 adults with MASLD. The risk factors assessed were obesity, dyslipidemia, diabetes mellitus, and hypertension. Advanced fibrosis was defined as stage F3–F4 by transient elastography (FibroScan). Bivariate analysis was performed using the Chi-square test, and independent risk factors were identified through binary logistic regression. Statistical significance was set at $p < 0.05$ with a 95% confidence level.

Results: The mean age was 50.5 ± 12.3 years. Dyslipidemia was the most frequent risk factor (57.5%), followed by obesity (44.8%). In the bivariate analysis, obesity and diabetes mellitus were significantly associated with advanced fibrosis ($p < 0.001$ and $p = 0.017$, respectively). However, in the multivariate analysis, only obesity remained an independent risk factor (OR = 7.2; 95% CI: 2.2–23.0; $p = 0.001$). Other variables lost statistical significance after adjustment. Diabetes mellitus may not be significant due to limited sample size, consistent with existing evidence

Conclusions: Although both obesity and diabetes mellitus were associated with advanced fibrosis, only obesity remained independently significant. These findings highlight the importance of weight management to prevent fibrosis progression in MASLD patients.

Conflict of interest: None

Clinical factors associated with advanced fibrosis in patients with MASLD (n=181)

Variable	Bivariate p-value	Multivariate OR (IC 95%)	Multivariate P-valor
Obesity	<0,001	7.2 (2.2-23.0)	0,001
Dyslipidemia	0,726	0,4 (0,1-1,2)	0,125
Diabetes Mellitus	0,017	2,9 (0,9-9,0)	0,054
Hypertension	0,387	1,07 (0,3-2,9)	0,894

Note: OR= Odds Ratio; CI= Confidence interval.

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#154

NON-INVASIVE SERUM BIOMARKERS TO PREDICT ADVANCED FIBROSIS IN AUTOIMMUNE HEPATITIS IN MEXICAN POPULATION: RPR AND HALP-SCORE

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Introduction and Objectives: Looking for non-invasive and cost-effective models to predict fibrosis in autoimmune hepatitis (HAI), modern scores such as RDW/Platelet ratio (RPR) and the hemoglobin, albumin, lymphocyte, and platelet (HALP) have been studied. These have demonstrated greater accuracy than traditional markers such APRI or FIB-4. These require further study and validation in mexican population.

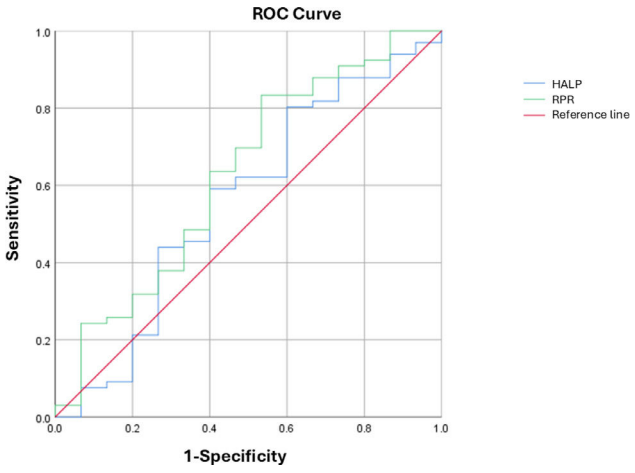
Materials and Methods: Eighty-one patients histopathological diagnosis of HAI from Hospital de Especialidades IMSS Monterrey, Mexico, were included from January 2022 to December 2024. Fibrosis was assessed using METAVIR system, categorized as F0: absence of fibrosis; F1: portal fibrosis without septa; F2: portal fibrosis with few septa; F3: multiple bridging; and F4: cirrhosis. Grades F3-F4 were considered advanced fibrosis. Biochemical values were obtained 1−20 days prior biopsy. The RPR was calculated RDW [%]/Platelets [10^9/Liter] and HALP-Score was obtained (Hemoglobin [g/dL] by albumin [g/dL] by lymphocytes [k/uL]/Platelets [10^9/Liter]. Statistical analyses were performed using SPSS 25.0 (IBM SPSS Statics). Type of study: Analytical, retrospective and observational.

Results: For RPR, an area under the curve (AUC) of 0.628 was obtained with confidence intervals (95%) of 0.461−0.796. The cutoff point, calculated using Youden index, was 0.0617. The sensitivity of the RPR was 87.9%, with a specificity of 26%. The positive likelihood ratio was 1.2 and the negative likelihood ratio was 0.45. The false negative rate was 9.8%. For HALP-Score, an AUC of 0.560 was obtained with confidence intervals (95%) of 0.636−0.600. The cutoff point, calculated using Youden index, was 0.497. The sensitivity of HALP-Score is 62.1%, with a specificity of 38%. The positive likelihood ratio is 1.04 and the negative likelihood ratio is 0.95. The false negative rate is 30.86%.

Conclusions: These models didn't demonstrate statistical significance, and therefore warrant further study for validation as an auxiliary tool in our population.

Conflict of interest: None

ROC Curve



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#158

EFFECTS OF MELATONIN AND PHYSICAL EXERCISE ON THE ANALYSIS OF THE INTESTINAL MICROBIOTA IN AN EXPERIMENTAL MODEL OF CIRRHOSIS: COMPOSITION, DIVERSITY AND FUNCTIONAL CHANGES

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Introduction and Objectives: Changes in the composition of the intestinal microbiota have been associated with several diseases, including cirrhosis. Melatonin has antioxidant and anti-inflammatory properties with protective effects in experimental models. Physical exercise is widely recognized for its systemic benefits.

To evaluate the intestinal microbiota in an experimental model of cirrhosis after treatment with melatonin and physical exercise.

Materials and Methods: Twenty male Wistar rats were divided into groups: CO, BDL, BDL+MLT and BDL+EX. Cirrhosis was induced by bile duct ligation. Melatonin was administered i.p. (20 mg/kg/day) and the exercise protocol consisted of swimming three times a week. After 28 days, fecal samples were collected for microbiota analysis by 16S rRNA gene sequencing. Amplicon sequence variants (ASVs) were identified and alpha diversity (Shannon index), PCA and differential abundance (Log Fold Change) analyses were performed.

Results: A total of 1197 ASVs. The predominant phyla were Firmicutes, Bacteroidetes, Proteobacteria and Actinobacteria, comprising more than 90% of the microbiota. In the BDL+MLT and BDL +EX groups, there was an increase in Blautia and Lachnospiraceae, producers of short-chain fatty acids; Turicibacter, associated with serotonergic signaling and potential protection against intestinal tumors; Eubacterium siraeum, with antiadipogenic effects via inhibition of the PI3K/AKT pathway; and Romboutsia, acting on carbohydrate and bile acid metabolism. In the BDL group, there was a reduction in Firmicutes and an increase in E. ruminantium, a pathogenic species.