

P-61 CLINICAL APPLICATION OF NAFLD FIBROSIS SCORE AND HEPAMET FIBROSIS SCORE IN CORONARY ARTERY DISEASE AND MASLD: A CROSS-SECTIONAL STUDY IN WESTERN MEXICAN POPULATION

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Conflict of interest: No

Introduction and Objectives: Coronary artery disease (CAD) is a leading cause of morbidity and mortality worldwide. Reliable knowledge of the prevalence of occult CAD, particularly anatomically confirmed CAD is limited and cardiovascular risk (CVR) models only predict the risk of an acute coronary event within a set period. It has been described that a FIB-4 score is associated with a higher CVR. **Objective:** to determine the utility of noninvasive markers of liver fibrosis in CAD.

Patients / Materials and Methods: A cross-sectional study in western Mexican population was conducted in two tertiary centers in central and western Mexico from March 2019 to April 2023. Patients with MASLD according to the latest recommendations (hepatic steatosis demonstrated by imaging study and at least one cardiometabolic criteria) who required percutaneous coronary angiography were included, demographic data and coronary angiographic were recorded. Noninvasive fibrosis indexes were calculated. Continuous variables were subjected to a distribution analysis and equality of variances to subsequently perform a mean comparison analysis with U-Mann-Whitney test between patients with monovascular, bivascular and trivascular involvement. A correlation analysis was also performed between the invasive markers and the Syntax index.

Results and Discussion: A total of 168 patients were included with a mean age of 66 ± 12 years with a predominance of male sex with 75.6% (n= 127). Angiographic findings included 37.5%, monovascular, 32.7%, bivascular and 29.8% trivascular involvement. Comparison of means of noninvasive markers of fibrosis demonstrated a significant difference in HFS between patients with monovascular (0.17 ± 0.18), bivascular (0.27 ± 0.18) and trivascular (0.30 ± 0.25) coronary artery disease, $p \leq 0.001$. A correlation was also demonstrated between non-invasive markers and Syntax score: FIB-4 ($r = 820$, $p \leq 0.001$), APRI ($r = 766$, $p \leq 0.001$), HFS ($r = 869$, $p \leq 0.001$), ($r = 820$, $p \leq 0.001$), NFS ($r = 807$ $p \leq 0.001$).

Conclusions: The score of noninvasive tools to assess liver fibrosis correlates positively with the complexity of CAD and could be considered as noninvasive tools to be used in the CVR assessment in MASLD patients.

Mean comparative analysis of noninvasive fibrosis scores in coronary arterial disease				
	Monovascular (n=63)	Bivascular (n=55)	Trivascular (n=50)	p
NFS	0.27 ± 1.6	0.95 ± 1.6	0.42 ± 1.74	0.004
HFS	0.17 ± 0.18	0.27 ± 0.18	0.30 ± 0.25	<0.001
FIB4	3.84 ± 2.71	4.61 ± 3.08	4.03 ± 3.46	0.82
APRI	1.46 ± 1.11	2.16 ± 3.30	1.29 ± 1.03	0.36

Table 1_Mean comparative analysis of noninvasive fibrosis scores in coronary arterial disease

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P-62 SARCOPENIA AND PSOAS MUSCLE DENSITY ARE INDEPENDENT PREDICTORS OF SURVIVAL OF LIVER TRANSPLANT RECIPIENTS

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Conflict of interest: No

Introduction and Objectives: Studies have suggested an association between sarcopenia and mortality in liver transplant (LT) recipients. However, sole measurement of the area of skeletal muscle employing Psoas Muscle Index (PMI) does not estimate the muscle composition and degree of adipose atrophy of the muscle. We evaluated to association of PMI and Psoas Muscle Density (PMD) and post-LT survival in hispanic population

Patients / Materials and Methods: Retrospective review of a cohort of LT recipients at UC-Christus Clinical Hospital between 2016 and 2022. Two observers measured PMI and PMD on CT using NIH ImageJ software (version 13.0.6). Sarcopenia was defined as PMI <4.9 cm²/m² in men and <3.9 cm²/m² in women. Low psoas muscle density was defined as PMD <38 HU in men and PMD <34 HU in women. We used univariable and multivariable Cox proportional regression models to predict post-LT mortality

Results and Discussion: 112 patients with cirrhosis were included in the analysis (58 ± 10 years, 55% men). Etiologies: MASLD 50%, ALD 17%, MetALD 3.2%, autoimmune hepatitis 10%, HCV 6.4%, PBC 1.3%, others 12.1%. Child-Pugh A/B/C (5%/40%/55%), MELD Na 28 ± 7 , 27 (25%) patients presented sarcopenia. During the 72-week follow-up, 19 (17%) patients died. Sarcopenia was associated with a higher risk of post-LT mortality (HR = 3.9, 95% CI [1.6- 9.6], $p = 0.003$). Low PMD is associated with a higher risk of post-LT mortality (HR = 3.7, 95% CI [1.5-9.2], $p = 0.004$) (figure). Patients with sarcopenia and low PMD had a higher risk of post-LT mortality (HR = 10, 95% CI [2.8-38], $p < 0.001$).

Conclusions: Sarcopenia and low psoas muscle density are independently associated with a higher risk of post-LT mortality, and in combination they are a strong indicator of a higher risk of post-LT mortality.

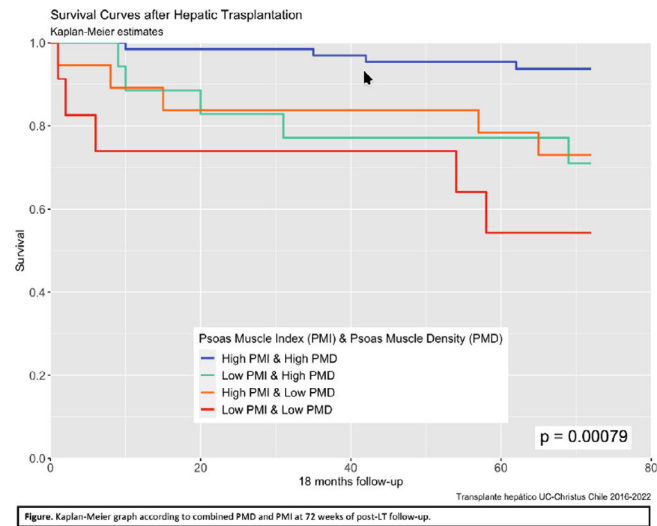


Figura
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P-63 CHARACTERISTICS AND CLINICAL OUTCOMES IN CIRRHOTIC PATIENTS TREATED IN ICU BETWEEN 2018-2023

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Conflict of interest: No

Introduction and Objectives: Cirrhosis is a chronic disease with a variable clinical course ranging from compensated stage to acute-on-chronic liver failure. The management of such patients focuses on multiorgan support in the intensive care unit (ICU). However, the criteria for defining the futility of management or even potential candidates for transplantation in our setting are not clearly established. **Objectives:** To describe the sociodemographic and clinical characteristics and outcomes of adult patients with liver cirrhosis treated in the ICU between 2018 and 2023 at the Cardioinfantil Foundation.

Patients / Materials and Methods: A retrospective observational cohort study was conducted. Quantitative variables were described as mean and standard deviation or median and interquartile range, depending on their distribution. Qualitative variables were expressed as frequencies and percentages. To compare variables between groups, Student's t tests were used for continuous variables and chi-square tests or Fisher's exact test for categorical variables. Logistic regression models were applied to identify risk factors associated with mortality, adjusting for possible confounders.

Results and Discussion: Statistically significant differences ($p<0.001$) were found associated with higher mortality in patients with higher CHILD, MELD and CLIF-C AD scores. Higher mortality was also found in patients with associated renal dysfunction, who developed any type of infection or who required IMV. No differences in survival were found in patients who underwent transplantation.

Conclusions: Patients with cirrhosis treated in the ICU have a higher mortality rate in relation to greater renal dysfunction, need for IVM, impaired hepatic synthesis or the presence of any type of infection. Respiratory and urinary tract infection were the most common. No association was found with systemic inflammatory

response and mortality. The proportion of suitable patients eligible for transplant was low. Prospective studies are required to identify the patient population that may benefit from early transplantation and thereby improve their survival.

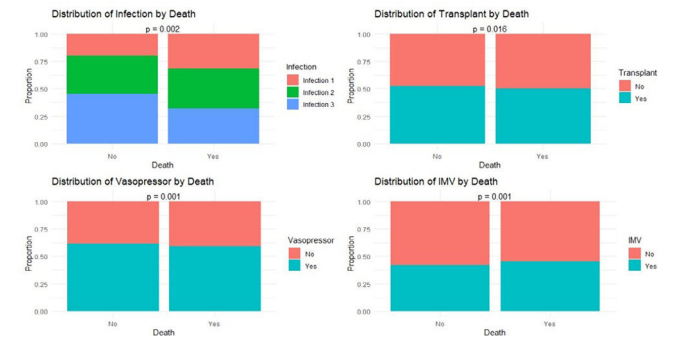


Table 1. Demographic and clinical characteristics and risk markers				
	Total population n= 121	Dead n= 35		p Value
Age, median (IQR)	60.00 [52.00, 64.00]	61.00 [52.25, 65.00]		0.054
CHILD, median (IQR)	11.00 [9.00, 12.00]	11.00 [10.00, 12.00]		<0.001
MELD, median (IQR)	20.00 [16.00, 26.00]	22.00 [18.25, 28.00]		<0.001
MELD-Na, median (IQR)	23.00 [18.00, 30.00]	19.00 [13.00, 23.00]		<0.001
CLIF-C AD, median (IQR)	56.00 [50.75, 66.00]	52.00 [46.00, 56.00]		0.001
Creatinine, median (IQR)	1.20 [0.80, 2.00]	1.30 [0.90, 2.18]		<0.001
Infection (%)	85 (70.2)	17 (48.6)		0.002
Transplant (%)	11 (9.1%)	7 (20%)		0.016
HRS, n (%)	66 (54.5)	4 (11.4)		<0.001
IMV, n (%)	29 (24.0)	25 (29.1)		<0.001

Table 1. Patient Characteristics

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P-64 DOWNSTAGING STRATEGY FOR LIVER TRANSPLANTATION IN HEPATOCELLULAR CARCINOMA. A COHORT STUDY IN A COLOMBIAN HOSPITAL

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Conflict of interest: No

Introduction and Objectives: Hepatocellular carcinoma (HCC) with low tumor burden can be treated by liver transplantation (LT). Downstaging is a strategy to reduce tumor burden and allow transplantation. **Objectives:** To present the features and outcomes of patients undergoing LT with a downstaging and to compare them with patients transplanted according to Milan criteria

Patients / Materials and Methods: Retrospective cohort study of transplanted patients from July 2012 to January 2024 in a Colombian hospital. Downstaging was carried out in accordance with UNOS criteria. Death and recurrence of HCC were the primary outcomes. Cox proportional hazards model was adjusted for age and Child-Pugh score.

Results and Discussion: 79 patients, 17 in downstaging group (DG) and 62 in Milan Group (MG). All patients had cirrhosis. Median age was 60 years and 71% were men. DG has less diabetes mellitus than MG (24% vs. 48%), less comorbidities (82% vs. 92%), better Child-Pugh, less ascites (6% vs. 50%), less encephalopathy (18% vs. 45%) and less variceal bleeding (17% vs. 32%). In DG, the median number of tumors was 2 (IQR: 1-3, 29% with just one) and in MG it was 1 (IQR: 1-1, 79% with just one). Downstaging was performed using either TACE alone (88%) or in combination with radiofrequency ablation (22%). Liver specimens showed a high sum of tumor diameters in DG