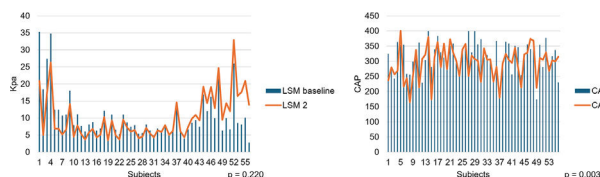


improving indirect markers of liver steatosis, inflammation, and fibrosis. It also addresses systemic and adipose tissue insulin resistance in patients with type 2 diabetes and metabolic dysfunction-associated fatty liver disease (MASLD). This study aims to evaluate whether sustained consumption of pioglitazone over 12-24 months can improve liver stiffness in individuals diagnosed with biopsy-proven metabolic dysfunction-associated steatohepatitis (MASH).

**Patients / Materials and Methods:** Retrospective data from 56 MASLD patients who received pioglitazone treatment for 12-24 months (15-30 mg daily) were gathered from three public hospitals in Brazil. Vibration-controlled transient elastography [VCTE (Fibroscan™)] was performed before and after pioglitazone treatment as a non-invasive method to monitor disease progression. Additionally, a thorough analysis of both laboratory and clinical data was conducted.

**Results and Discussion:** Most participants were female (63%, n=35) and obese (BMI  $31.1 \pm 5.2$ ) with a mean age of  $58.4 \pm 11.4$  years. Initially, participants mostly had hypertension (71%, n=40) and type II diabetes (61%, n=34). During the second evaluation, the number of subjects with dyslipidemia and statin use increased. Initially, the liver stiffness measurement (LSM) median was 8.1 kPa (Min: 2.8; Max: 35.3) and 7.2 kPa (Min: 3.5; Max: 32.9) at the second evaluation. Prolonged pioglitazone treatment demonstrated LSM attenuation in 63% of cases (n=35), resulting in an absolute reduction ranging from 0.1 to 14.4 kPa and a relative reduction ranging from 1.25% to 40.8%. Further analysis comparing the group with improved versus the group with worsened liver stiffness showed a decrease in the CAP parameter, FAST score, and levels of ALT, AST, GGT, TG, and ferritin.

**Conclusions:** The administration of pioglitazone for 12 to 24 months effectively reduced hepatic inflammation and enhanced VCTE parameters in 63% of cases.



Comparison of the effect of long-term pioglitazone intake on VCTE parameters

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#### P-97 THE ROLE OF PSYCHOLOGICAL STRESS IN METABOLIC DYSFUNCTION ASSOCIATED STEATOTIC LIVER DISEASE. A PILOT STUDY

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**Conflict of interest:** No

**Introduction and Objectives:** Metabolic dysfunction associated steatotic liver disease (MASLD) pathogenesis is multifactorial. Increasing evidence highlight the role of psychosocial stress in liver

disease progression. However, psychological characteristics involved in stress response in MASLD has not been investigated. **Objective:** To assess psychosocial stress and its relationship with liver damage in patients with MASLD.

**Patients / Materials and Methods:** A transversal, descriptive study, was performed in MASLD patients diagnosed by liver biopsy recruited from Gastroenterology Unit of HCUCH. Demographic and clinical data was recorded using RedCap platform. Psychological assessment was performed by questionnaires: Perceived Stress Scale-14 (PSS-14), Anxiety-Depression Survey (HADS), Coping Strategy Inventory (CSI), Quality of Life (QoL SF-36), and Hexaco-60. Liver function and liver damage was evaluated by blood test and imaging (echography, Fibroscan and magnetic nuclear resonance) respectively. Statistical analysis including t-test and chi-squared, were performed using GraphPad Prism. Significance set at  $p < 0.05$ . The study was approved by HCUCH ethics committee.

**Results and Discussion:** A total of 13 patients were recruited, mainly female (85%), age range from 29-73 years. Moderate stress levels were observed in 53.8% of participants. A higher PSS score was observed in patients with moderate-severe steatosis (moderate-severe steatosis  $29.0 \pm 9.51$  vs mild steatosis  $18.20 \pm 6.94$ )  $p=0.047$ . Patients with significant fibrosis reported poorer mental health QoL (without fibrosis  $53.60 \pm 9.25$  vs with significant fibrosis  $42.40 \pm 10.40$ )  $p=0.022$ . Moderate-severe steatosis presented a trend of increased anxiety prevalence (mild steatosis 28.57% vs moderate-severe 71.43%)  $p=0.113$ . No significant differences were found in depression scores, overall and physical QoL in relation to steatosis and fibrosis degree. **Conclusions:** This pilot study suggests that negative psychosocial factors have a pathogenic role in liver damage. Increased psychological stress and lower mQoL were the principal components involved. These findings highlight the importance of addressing mental health in MASLD patients in clinical management. Funding OAIC n°13022

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#### P-98 LACTATE/ALBUMIN RATIO AS A MARKER OF MORTALITY IN PATIENTS HOSPITALIZED WITH ACUTE ON CHRONIC LIVER FAILURE IN A MEXICAN HOSPITAL: CLINICAL ANALYSIS AND PERSPECTIVES

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**Conflict of interest:** No

**Introduction and Objectives:** Albumin and lactate are markers of systemic inflammation, which are altered by their hepatic metabolism; however, they can be useful indicators of mortality in patients with cirrhosis. This study aimed to determine the association between lactate/albumin ratio levels and mortality in patients with ACLF.

**Patients / Materials and Methods:** A retrospective and observational cohort study was conducted. Eighty-five patients diagnosed with ACLF according to the EASL-CLIF criteria were included from February 2022 to May 2024. Patients with hepatocellular carcinoma were excluded.

Data analysis was performed using GraphPad Prism version 10.2.3 and Microsoft Excel software. An ROC curve was performed to establish the cutoff point of the lactate/albumin ratio, as well as determine the sensitivity and specificity of the model to predict 28-day mortality.

**Results and Discussion:** Eighty-five patients were included, 68 (80%) men and 17 (20%) women; average age 52.4 years (39 -80). Alcohol consumption was the main cause of cirrhosis in 74 (87.05%), autoimmune diseases in 7 (8.23%), and MASLD in 4 (4.70%) (Table 1). 12 patients (14.11%) had ACLF grade 1, 29 (34.11%) grade 2 and 44 (51.76%) grade 3. With failure: kidney 61 (71.76%), liver 57 (67.05%), brain 49 (57.64%), coagulation 37 (43.52%), respiratory 15 (17.64%) and circulatory 5 (5.88%) (Table 1). 37 (43.52%) died within the first 28 days. The cutoff point of the lactate/albumin ratio was 1.74 (AUC 0.87), with a p value <0.0001, sensitivity 71.7% and specificity 58.8% (95% CI) (Figure 1). **Conclusions:** The cutoff point of the lactate/albumin ratio of 1.74 allows for the objective prediction of mortality in patients with ACLF using easily accessible laboratory tests.

Figure 1.  
Lactate/albumin ratio AUC

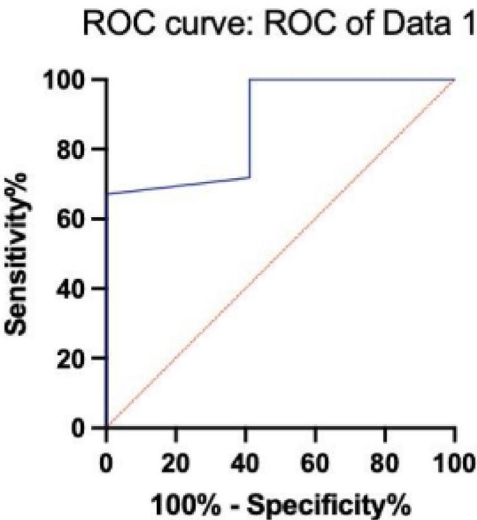


Table 1.  
Descriptive statistics of study population.

Age years	39- 80
Sex:	
Male, N (%)	68 (80%)
Female, N (%)	17 (20%)
Cirrhosis etiology:	
Alcohol, N (%)	74 (87.05%)
Autoimmune, N (%)	7 (8.23%)
MAFLD, N (%)	4 (4.70%)
ACLF:	
Grade 1, N (%)	12 (14.11%)
Grade 2, N (%)	29 (34.11%)
Grade 3, N (%)	44 (51.76%)
Organ failure:	
Kidney, N (%)	61 (71.76%)
Liver, N (%)	57 (67.05%)
Brain, N (%)	49 (57.64%)
Coagulation , N (%)	37 (43.52%)
Respiratory, N (%)	15 (17.64%)
Circulatory, N (%)	5 (5.88%)

**P-99 CHARACTERIZATION OF PATIENTS WITH LIVER CIRRHOSIS, ITS COMPLICATIONS AND SURVIVAL.**

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**Conflict of interest:** No

**Introduction and Objectives:** The complications of liver cirrhosis significantly influence the survival of these patients.

**Objective:** Characterize patients with liver cirrhosis, its complications and survival.

**Patients / Materials and Methods:** Longitudinal prospective study in the Gastroenterology service in a tertiary hospital of national reference. Period: December 2017 - December 2019. Sample: 52 patients who met selection criteria. Clinical variables were recorded to determine the stage of cirrhosis, the Child-Pugh and the complications presented. Data were summarized, association between variables was evaluated, and survival was estimated.

**Results and Discussion:** The average age was 59 ± 11.0 years, men predominated (57.7%), alcohol consumption as the most frequent etiology (53.3%), ascites decompensation as the debut form (55.8%) and complication most incident (75%) followed by jaundice (40.4%) and encephalopathy (28.8%). F1 esophageal varices were the most confirmed endoscopic finding (26.9%), with stage 4 cirrhosis (69.2%) and Child-Pugh B (55.8%) predominating in the sample. At the end of the study, 19.2% of the patients died, overall survival was 89.0% at one year and 55.1% at two years, the association of the Child-Pugh scale as a predictor of mortality being statistically significant.

**Conclusions:** An association was demonstrated between the causes of cirrhosis and sex, mainly alcohol in men. One fifth of the patients died and overall survival showed a notable decrease at one year and two years, the estimate of survival according to the Child-Pugh scale being significant.

Table 1. Summary of estimated overall survival, according to clinical stages of cirrosis and Child-Pugh scale.

	Survival			Log Rank test (p value)
	6 months	1 year	2 years	
Overall	95,7 %	89,0 %	55,1 %	
Clinical stage				
Compensated	100,0 %	100,0 %		0,221
Decompensate	97,4 %	86,4 %	52,5 %	
Child-Pugh scale				
A	100,0 %	100,0 %	-	0,001
B	100,0 %	92,3 %	68,9 %	
C	83,3 %	5,0 %	0,0 %	

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<https://doi.org/10.1016/j.aohep.2024.101712>