

body mass index lowers its sensitivity and specificity, so it should be performed with other advanced imaging modalities.

The authors declare that there is no conflict of interest.

Table

Relationship of CT/HDL, TG/HDL, lipid profile and metabolic syndrome with the degree of CAP by FibroScan

Parameters	Degree of CAP by FibroScan			P-value
	S1	S2	S3	
Triglycerides ^a	111.5 (14.82)	178.75 (64.5)	236.41 (113.10)	0.009
HDL cholesterol ^a	51.02(9.09)	46.49(10.17)	41(9.24)	0.068
LDL cholesterol ^a	126.75 (29.47)	113.72 (31.55)	115.94 (27.08)	0.331
Total cholesterol ^a	193 (48.10)	180.95(40.5)	188(38.68)	0.781
CT/HDL Ratio ^b	3.9 (3.1-4.1)	3.8(2.3-6.8)	4.5(3.1-7.2)	0.076
TG/HDL Ratio ^b	2.3 (1.6-2.7)	3.8 (0.9-7.9)	4.6 (2-16.9)	0.008
Metabolic syndrome ^c				
Yes	1 (2.9)	13 (38.2)	20 (58.82)	0.003
No	3 (21.42)	7 (50)	4 (28.5)	

a: mean (standard deviation) b: median (ranges) c: number (percentage)

LDL: Low Density Lipoprotein HDL: High Density Lipoprotein

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DIFFERENTIAL PROFILE OF PRO-INFLAMMATORY / ANTI-INFLAMMATORY CYTOKINES AND MALONDIALDEHYDE IN PATIENTS WITH ALCOHOL-INDUCED OR OBESITY OR MIXED INJURY

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Introduction and Objectives: Dysregulation of pro-inflammatory/anti-inflammatory cytokines and oxidative stress markers has been reported in Non-Alcoholic Steatohepatitis (NASH) and alcoholic steatohepatitis (ASH); however, in the disease recently known, as Both Alcoholic and Non-Alcoholic Steatohepatitis (BASH) that meets the criteria of ASH and NASH have not been described. The objective was to evaluate the influence of alcohol and obesity on a differential profile of cytokines and malondialdehyde (MDA) in patients with these etiologies.

Material and methods: Cross-sectional, prospective, observational study. Patients from the "Dr. José E. González" from March 2019-March 2020, with a diagnosis of ASH (alcohol consumption \geq 5 years, 30 g/day for men and 20 g/day for women), NASH (demonstrated by ultrasound, FibroScan or FibroMax) and BASH (ASH and NASH criteria). The serum cytokines interleukin-8 (IL-8), interleukin-6 (IL-6), tumor necrosis factor alpha (TNF- α), interleukin-1 β (IL-1 β), interleukin-10 (IL-10) and malondialdehyde (MDA) were determined. The protocol was approved by the ethics committee with registration MI19-000016. One-way analysis of variance was performed with Kruskal-Wallis and Dunn's post hoc. The results were expressed as median (interquartile range). The analysis was performed using Graph Pad Prism (v. 7.04, San Diego, CA, USA). A value of $p < 0.05$ was considered significant.

Results: The patients were: 34 BASH, 43 NASH and 35 ASH. The severity of the patients with respect to clinical and biochemical parameters in increasing order was NASH < BASH < ASH. It was

observed in increasing order that the levels of the cytokines IL-8, IL-6, IL-10 were: NASH < BASH < ASH; TNF- α levels were: BASH < NASH < ASH; IL-1 β levels show no significant difference between groups (Figure). The BASH group showed higher concentration levels of MDA [20.00 (9.00-30.50) pg/mL] with significant difference ($p = 0.0434$) compared to NASH [14.00 (3.00-19.00) pg/mL], but not with ASH (Figure). Serum levels of IL-6 (A; $p < 0.0001$), TNF- α (B; $p = 0.0014$), IL-8 (C; $p < 0.0001$), IL-10 (D; $p < 0.0001$) and IL-1 β (E; Not significant) in the different study groups.

Discussion: In ASH and NASH, common pathogenetic mechanisms mediated by pro-inflammatory.

The authors declare that there is no conflict of interest.

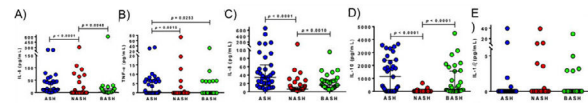


Figure. Serum levels of IL-6 (A; $p < 0.0001$), TNF (B; $p = 0.0014$), IL-8 (C; $p < 0.0001$), IL-10 (D; $p < 0.0001$) and IL-1 β (E; NS) in the different study groups. The values were expressed as median (interquartile range). NS: not significant.

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PROFILE OF PRO AND ANTI-INFLAMMATORY CYTOKINES IN PATIENTS WITH CHRONIC LIVER DISEASE IN THE COMPENSATION, INFLAMMATION AND IMMUNOSUPPRESSION PHASES

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Introduction and objectives: Decompensated cirrhosis is defined by the onset of complications and is associated with immune dysfunction. This is the result of two processes: systemic inflammation and damage made by the immune system. Our objective was to determine the profile of pro and anti inflammatory cytokines in patients with chronic liver disease: alcoholic (OH), non-alcoholic steatohepatitis (NASH), autoimmune liver disease (AILD) and hepatitis C (HCV), in the phases of compensation, inflammation and immunosuppression, based on functional classifications and prognosis with the CHILD- PUGH, MELD and D'Amico scales.

Methods and materials: Prospective, observational, and cross-sectional study, made in the University Hospital, Dr. Jose E. Gonzalez during 2019-2020. A total of 108 patients were included: 28 OH, 27 NASH, 25 HCV and 27 AILD. The diagnosis and functional classification was made according to international guidelines. Inclusion criteria: over 18 years of age, signed informed consent. Exclusion criteria: hepatocellular carcinoma, other autoimmune pathologies. Blood samples (10 ml) were collected to quantify TNF- α , IL-8, IL-10, IL-1, IL-6. The protocol was approved by the ethics committee with registration MI20-0002. A one-way ANOVA was used to determine the differences between groups and stages

Results: In OH, there is an increase in IL-6 and IL-8 in the decompensation phase, Child-Pugh stage C, D'amico stage 5 and MELD from 25 to 34 points. NASH patients had an increase in IL-8 in the inflammation phase as assessed by Child-Pugh B and D'amico 3 and 4. There was an increase in IL-6 in the immunosuppression phase. In patients