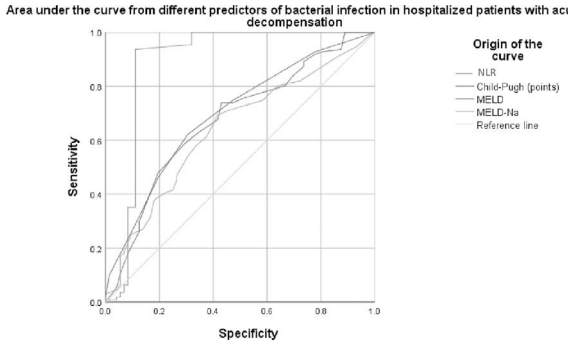
distribution by etiology was as follows: Alcohol 72 (39.3%), MASLD 55 (30.1%), Autoimmune 27 (14.8%), Hepatitis C Virus 16 (8.7%), MetALD 16 (8.7%). According to the Child-Pugh score, 91 (49.7%) were class C, 68 (37.2%) were class B, and 24 (13.1%) were class A. Acute decompensations reported were: Variceal bleeding in 90 patients (49.1%), Ascites in 79 (43.1%), and Hepatic Encephalopathy in 102 (55.7%). The degree of acute-on-chronic liver failure upon admission was established: Grade 1 in 30 patients (16.3%), grade 2 in 29 (15.8%), and grade 3 in 12 (6.5%). It was found that 111 (60.7%) patients had bacterial infections during hospitalization, which were urinary infections 69 (37.7%), spontaneous bacterial peritonitis 22 (12%), pneumonia 13 (7.1%), bacteremia 7 (3.8%). NLR ≤ 1.9 predicted bacterial infection with a sensitivity of 94% and specificity of 89% (AUC-ROC: 0.89, 95% CI 0.82-0.95, p <0.0001), compared to other scales such as Child-Pugh, MELD, or MELD-Na with AUC-ROC of 0.69 (0.62-0.77), 0.68 (0.60-0.76), 0.64 (0.56-0.72) respectively.

Conclusions: The Neutrophil-to-Lymphocyte Ratio (NLR) is highly effective in predicting bacterial infections in patients with liver cirrhosis, surpassing the Child-Pugh, MELD, and MELD-Na scales. This indicates that NLR is a valuable tool for early identification of infections in this patient population.

Ethical statement: This study was reviewed and approved by the ethics committee.

Declaration of interests: No conflicts of interest.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.



NLR: Neutrophil-to-Lymphocyte Ratio; MELD: Model for End-Stage Liver Disease; MELD-Na: Model for End-Stage Liver Disease with Sodium.

https://doi.org/10.1016/j.aohep.2025.101798

Liver alterations found in patients with inflammatory bowel disease in a tertiary care center.

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Introduction and Objectives: Inflammatory bowel disease (IBD) encompasses two main conditions: Crohn's disease (CD) and ulcerative colitis (UC); the association between these diseases and liver diseases has been described. The objective of this work is to report the frequency of these alterations in a tertiary hospital.

Material and Patients: Observational, retrospective, descriptive, case series type. Patients with a diagnosis of IBD were included, including its two variants, CD and UC. An intentional search was carried out for alterations in the liver biochemical profile, findings in imaging methods and their clinical correlation, primary biliary cholangitis (PBC), primary sclerosing cholangitis (PSC), autoimmune hepatitis (AIH), among other anatomical alterations. Qualitative data are expressed in percentages and quantitative data in mean±SD.

Results: 62 patients were included, of which 31 were men and 31 were women, with a mean age of 42.74±15.47 years. Within this universe, there were 22 patients with CD (35.4%), 40 patients with UC (64.5%) who, according to the Montreal classification, were classified as E1=4 patients (10%), E2=12 patients (30%), E3=24 patients (60%). There were 16 patients (25.8%) who had some reported liver alteration, of which 8 (12.9%) with autoimmune liver diseases, 5 with PSC (8.06%), 2 with PBC (3.22%), 1 with HAI (1.61%). When intentionally searching for liver morphological alterations and as an incidental finding, they were found 3 (4.83%) simple hepatic cysts, 1 (1.61.%) hepatic hemangioma, and finally, 2 (3.22%) hepatitis C virus (HCV) infections.

Conclusions: IBD is commonly associated with autoimmune liver disorders. Likewise, the CUCI-PBC and CUCI-HAI relationship was found, which agrees with the international literature and is extrapolated with the population studied. Other incidental findings are also frequent, especially the high frequency of HCV compared to the general population.

Ethics statement: The study was conducted in accordance with the Helsinki Declaration (2013 World Medical Association update).

Declaration of interests: None.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

https://doi.org/10.1016/j.aohep.2025.101799

Correlation of Cardiovascular Risk Score with Alterations in Carotid Intima-Media Thickness in Patients with MASLD

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Introduction and Objectives: MASLD is associated with cardiovascular disease due to systemic inflammation and endothelial dysfunction. Carotid intima-media thickness (CIMT) and atherosclerosis are considered markers of generalized atherosclerosis and increased cardiovascular risk (CVR). The objective of this study is to describe the correlation between CVR and changes in CIMT in patients with MASLD.

Materials and Patients: This observational, cross-sectional, analytical study was conducted at the Instituto de Investigaciones Médico-Biológicas liver clinic from January 2023 to April 2024. Patients who met the eligibility criteria provided informed consent and underwent the following procedures: transitional liver elastography (TE), carotid Doppler ultrasound (USG), somatometric measurements, and biochemical tests. Cardiovascular risk scores (Framingham, ASCVD, SCORE2) and FIB-4 were calculated. Participants were categorized into two groups based on carotid intima-media thickness, altered CIMT (>1.1 mm) and normal CIMT (<1.1

mm). A TE value >8 Kpa indicated a risk of advanced fibrosis. Numerical variables were reported as measures of central tendency and dispersion, while categorical variables were presented as frequencies and percentages. The Kolmogorov-Smirnov test assessed data distribution and the Levene test evaluated homoscedasticity. For group comparisons, Student's t-test or Wilcoxon test was used for numerical variables, and chi-square or Fisher's exact test for categorical variables. ROC curves were generated to analyze cardiovascular risk and atherosclerosis. Spearman's test was employed to evaluate correlations. Statistical analysis was conducted using SPSS version 26.

Results: This study included 51 patients: 17 (33.33%) with altered CIMT (age 58 [48-72], 58.8% women) and 34 (66.66%) without alterations (age 51.5 [30-68], 79.4% women). Pathological histories, elastography results, biochemical data, and CVR scores are summarized in Table 1. Patients with altered CIMT exhibited a higher age (58 [48-72] vs. 51.5 [30-68], p=0.005), higher LDL concentrations (133.93± 37.46 vs. 109.47±41.86 mg/dL, p=0.047), and elevated CVR scores: Framingham (5.8 [3.0-12.3] vs. 1.7 [0.57-5.05], p=0.037), ASCVD (8.4 [5.4-17.25] vs. 3.7 [1.95-10.2], p=0.047), and SCORE2 (8.1 [4.75-12.9] vs. 3.8 [1.7-6.85], p=0.012). Advanced fibrosis (>8 kPa) was more prevalent among patients with altered CIMT (55.6% vs. 21.4%, p=0.037) and was associated with higher CVR scores: ASCVD (15.7 [7.75-24.75] vs. 4.45 [1.97-9.67], p=0.001) and SCORE2 (11.3 [4.85-17.1] vs. 3.95 [2.3-8.12], p=0.004). Sub-analysis showed significant correlations of >8 kPa and high FIB-4 with SCORE2 (r=0.574, p=0.040) and (r=0.564, p=0.045), respectively. Patients with >8 kPa were more likely to have atherosclerosis (OR 4.58, 95% CI: 1.01-20.6, p=0.037) and altered CIMT (OR 4.2, 95% CI: 1.1-16.2, p=0.026). The area under the curve for detecting atherosclerosis was 0.768 (95% CI: 0.570-0.965, p=0.013) for ASCVD, 0.753 (95% CI: 0.552-0.953, p=0.019) for SCORE2, and 0.662 (95% CI: 0.457-0.867, p=0.133) for Framingham.

Conclusions: In our cohort, MASLD patients with >8 kPa exhibited a significant correlation with SCORE2 and an increased risk of atherosclerosis. These results highlight the importance of assessing cardiovascular risk and carotid alterations in patients with elevated liver stiffness (>8 kPa) and high cardiovascular risk scores.

Ethical statement: All patients have informed consent and personal data protection.

Declaration of interests: None.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-pro-fit sectors.

Table 1
Characteristics of patients with MASLD according to alterations in carotid intima-media layer thickness.

Variable	Altered CIMT n=17	Normal CIMT n=34	p-value
Population Characteristic			
Age	58(48-72)	51.5(30-68)	**0.005**
Sex			0.12
Men	7 (41.2%)	7 (20.6%)	
Female	10 (58.8%)	27 (79.4%)	
BMI	32.6(29.75-37.21)	31 (27.87-36.82)	0.609
BMI Classification			0.57
Normal Weight		2 (5.9%)	
Overweight	4 (23.5%)	12 (35.3%)	
Obesity Grade 1	4 (23.5%)	10 (29.4%)	
Obesity Grade 2	7 (41.2%)	6 (17.6%)	
Obesity Grade 3	2 (11.8%)	4 (11.8%)	
Smoking	5 (29.4%)	7 (20.6%)	0.484
Type 2 Diabetes	2 (11.8%)	13(38.2%)	0.5
Arterial hypertension	6 (35.3%)	11 (32.4%)	0.834
Hypercholesterolemia	1 (5.9%)	9 (26.5%)	0.081
Hypertriglyceridemia	-	10 (29.4%)	**0.013**
Hepatic Elastography			
KPA	7.6±2.6	5.85±3.00	0.177
F0	6 (35.3%)	20 (58.8%)	0.234
F0-F1		3 (8.8%)	
F2	4 (23.5%)	4 (11.8%)	
F3	4 (23.5%)	4 (11.8%)	
F3-F4	3 (17.6%)	2 (5.9%)	
F4		1 (2.9%)	
Kpa> 8	7 (41.2%)	7 (20.6%)	0.12
CAP	301±33.24	295±33.39	0.263
S0		1 (2.9%)	0.719
S1	2 (11.8%)	7 (20.6%)	
S2	3 (17.6%)	4 (11.8%)	
S3	12 (70.6%)	22 (64.7%)	
Fibrosis Risk Scales			
FIB-4	1.08 (0.85-1.25)	0.88 (0.54-1.39)	0.691
Low risk	14 (82.4%)	23 (67.6%)	0.532
Medium risk	2 (11.8%)	8 (23.5%)	
High risk	1 (5.9%)	3 (8.8%)	
Carotideo USG Doppler			
Stenosis	4.38±12.37		0.568
Atherosclerosis	7 (41.2%)	2 (5.9%)	**0.002**
RIMT (mm)	1.1 (0.75-1.2)	0.8 (0.7-0.925)	**0.004**
Altered RIMT n(%)	10 (58.8%)		**<0.0001**
LIMT (mm)	1.25 (1.1-1.375)	0.8 (0.7-0.9)	**<0.0001**
Altered LIMT n(%)	14 (82.4%)		**<0.0001**
Biochemical Studies			
Leukocytes (thousands /μL)	6.81±1.24	6.87±1.4	0.894
Hemoglobin (g/dL)	13.57±1.12	13.4±1.87	0.724
Platelets (g/L)	284.24±83.53	268.59±42.75	0.473
BT (mg/dL)	0.45(0.32-0.73)	0.5(0.34-0.62)	0.509
AST (UI/L)	24 (17.5-32.8)	24.15(18.5-42.05)	0.715
ALT (UI/L)	26.3(16.15-44.25)	27.6 (14-57.25)	0.635
FA (UI/L)	111 (80.5-147)	96 (74-135.25)	0.682
GGT (UI/L)	42 (24- 74.5)	30 (20.25-91.75)	0.482
PT (g/dL)	7.6 (7.4-7.9)	7.45 (7.22-7.67)	0.333
Albumin (g/dL)	4.32±0.5	4.35±0.39	0.852
Cholesterol (mg/dL)	204.87±38.98	184.23±42.56	0.1
HDL (mg/dL)	47.66±7.76	45.08±9.79	0.347
LDL (mg/dL)	133.93±37.46	109.47±41.86	**0.047**
VLDL (mg/dL)	26.6(22-30.7)	30 (20-35.1)	0.811
Triglycerides (mg/dL)	140 (113.5-163.5)	151 (111.5-176.5)	0.788
Glucose (mg/dL)	109(99.5-118.55)	96 (90-107.25)	0.185
Creatinine (mg/dL)	0.75 (0.63-0.97)	0.71 (0.61-0.82)	0.455
CRP (mg/dL)	6.52(2.0-8.19	1.5 (0.4-3.8)	0.324
Insulin (mg/dl)	17.85(13.65-39.4)	17.2 (12.75-24.20)	0.433
HOMA	4.16(3.72-11.13)	4.22 (2.93-6.22)	0.407
Insulin resistance	9 (90%)	23 (92%)	0.849
Blood Pressure			
SBP	130 (122.0-137.5)	125 (113.25-131.0)	0.337
DBP	80 (70-85)	80 (71-86.5)	0.754
Cardiovascular Risk Scales			
Framingham	5.8 (3.0-12.3)	1.7 (0.57-5.05)	0.037
Low	8 (47.1%)	25 (73.5%)	0.186
Moderate	4 (23.5%)	6 (17.6%)	
Moderately high	3 (17.6%)	3 (8.8%)	
High	1 (5.9%)		
Very high	1 (5.9%)		
ASCVD	8.4 (5.4-17.25)	3.7 (1.95-10.2)	**0.047**
Low risk	3 (17.6%)	18 (52.9%)	**0.038**
Borderline	2 (11.8%)	3 (8.8%)	
Intermedium	9 (52.9%)	7 (20.6%)	
High	3 (17.6%)	2 (5.9%)	
SCORE 2	8.1(4.75-12.9)	3.8 (1.7-6.85)	**0.012**
Low	5 (29.4%)	19 (55.9%)	**0.045**
High	5 (29.4%)	7 (20.6%)	
Very high	7 (41.2%)	4 (11.8%)	

RIMT: Right Intima-Media Thickness, LIMT: Left Intima-Media Thickness, GGT: Gamma-Glutamyl Transferase, TB: Total Bilirubin, AST: Aspartate Aminotransferase, ALT: Alanine Aminotransferase, ALP: Alkaline Phosphatase, TP: Total Proteins, HDL: High-Density Lipoproteins, LDL: Low-Density Lipoproteins, VLDL: Very Low-Density Lipoproteins, CRP: C-Reactive Protein, HOMA: Homeostatic Model Assessment, SBP: Systolic Blood Pressure, DBP: Diastolic Blood Pressure

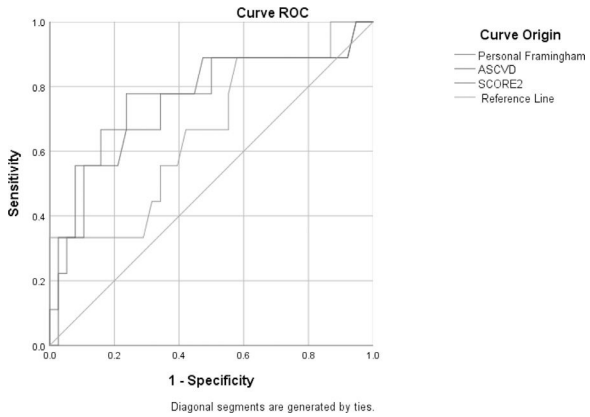

Figure 1. ROC curves of cardiovascular risk and atherosclerosis scales.

https://doi.org/10.1016/j.aohep.2025.101800

Atypical migratory reactive arthritis related to Hepatitis C Virus

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Introduction and Objectives: Reactive arthritis (RA) occurs after bacterial infections and is sporadically associated with enterovirus and hepatitis B virus (HBV) and hepatitis C virus (HCV). Clinically, we observe the characteristic triad of arthritis, uveitis and urethritis or diarrhea. We present a patient with RA associated with HCV.

Materials and Patients: Fifty-three-year-old man with a history of cannabis use as a youth, suspended 15 years ago. He begins with conjunctival injection, ocular pruritus, increased conjunctival secretion with ocular foreign body sensation, dysuria, and foamy urine. After 24 hours, there was pain, redness, increased volume and significant limitation of the left glenohumeral joint. He received non-steroidal anti-inflammatory drugs (NSAID) with a poor response. Seventy-two hours later, he presented pain in the right coxofemoral joint and 48 hours later in the right knee with increased volume. heat and redness with expansion of the edema to the right lower extremity, highlighting the pain in the ankle, knee and hip joints, which is why he went to the emergency room with suspicion of thrombosis (Image 1).

Results: During his hospitalization, a Doppler ultrasound of the lower extremity was performed, ruling out venous thrombosis. The left knee was punctured, obtaining transparent liquid with characteristics of transudate, acellular without bacteria in the biochemical analysis. Serum analysis, general urine analysis, urine culture, VDRL, antibodies against human immunodeficiency virus (HIV), antibodies against hepatitis C virus (Ac vs. HCV), hepatitis B surface antigen (HBVAg) and acute phase reactants (Image 2). Active bacterial infection was excluded, and he received 0.9% saline solution and 150 mg intravenous methylprednisolone every 12 hours, with improvement of symptoms and resolution of uveitis. Active infection with HCV was detected and the patient was discharged with 14 more days on prednisone 10 mg every 24 hours. As an outpatient, he received sofosbuvir/velpatasvir for 12 weeks with sustained viral response at week 12 (SVR12).

Conclusions: HCV can induce systemic inflammatory conditions and simulate other infections, such as, in this case, those associated with sexually transmitted bacteria, so it is important to request the Ac vs HCV and, if they are reactive, verify viral replication to administer specific treatment with direct-acting antivirals.

Ethics statement: Informed consent was obtained for the dissemination of the case, and the identity of the patient was protected when the information was presented.

Declaration of interests: None.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

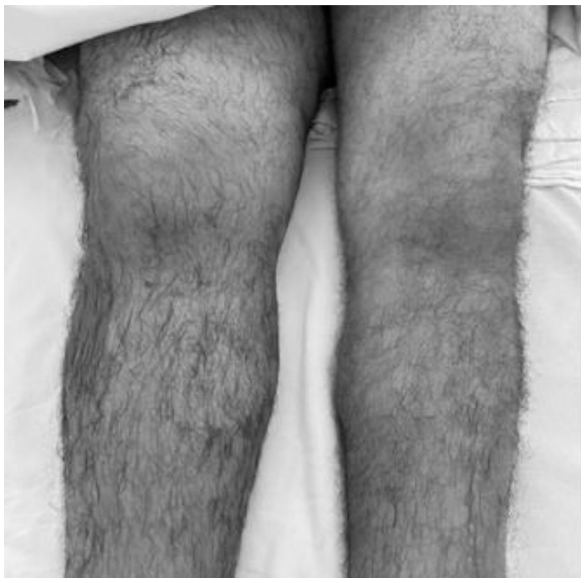

Figure 1. Knee arthritis and significant edema of the right lower extremity.

https://doi.org/10.1016/j.aohep.2025.101801

Chronic Kidney Disease and Hepatitis C virus.

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Introduction and Objectives: Hepatitis C virus (HCV) is an independent risk factor (RF) for chronic kidney disease (CKD) and for progression to end-stage renal disease (ESRD). The objective is to