

Table 1
Blood chemistry, complete blood count and liver function tests in patients with Ca undergoing treatment before and after immunotherapy (n=18).

	Patients before immuno-therapy (n= 18)	Patient after immunother-apy (n=18)				
Pattern (units)	Values (media ± DE)	Values (media ± DE)	t (gl)	P<0.05	IC 95%	Reference ranges (años)
Age	67.72 ± 14.40	69.63 ± 14.05	-3.15 (17)	0.006	-3.1 – -0.6	
Gender						
• Man	11	11				n=11
• Woman	7	7				n=7
CHILD PUG	6.56± 1.33	6.72± 1.74	-0.54 (17)	0.59	-0.81 – 0.47	
MELD	9.11± 2.11	10.39± 5.34	-1.11(17)	0.28	-3.69– 1.13	
MELD NA	9.17± 2.22	10.89± 6.07	-1.36 (17)	0.18	-4.38 – 0.93	
MELD 3.0	10.56± 2.79	12.06± 5.62	-1.11 (17)	0.28	-4.34– 1.34	
ALBI	-1.95± 0.81	-1.91± 0.68	-0.14 (17)	0.88	-0.56 – -0.49	
Leukocytes x103/μL	6.15± 2.94	5.57± 2.45	0.87 (17)	0.39	-0.80– 1.95	5 - 10
Hemoglobin g/dL	13.02 ± 2.67	13.02 ± 2.77	0.00 (17)	1.00	-1.36 – 1.36	13.5 – 18
Platelet x10 ⁹ /μL	265.59± 80.79***	169.00 ± 80.80***	1.54 (16)	0.14	-36.24– 229.41	150 – 450
PT (seconds)	12.95 ± 4.11	11.41 ± 3.63	1.13 (17)	0.27	-1.32– 4.40	11.0 – 13.5
INR	1.94± 3.34***	1.14 ± 0.22***	1.01 (17)	0.32	-0.87 – 2.48	≤1
Total Bilirubin (mg/dL)	1.27± 0.63***	1.58± 1.26***	-1.24 (17)	0.22	-0.82 – 0.21	0.2 – 1.2
Direct Bilirubin (mg/dL)	0.44 ± 0.43***	0.57 ± 0.69***	-0.83 (17)	0.41	-0.45 – 0.19	0 - 0.2
No Direct Bilirubin (mg/dL)	0.83± 0.52***	1.01± 0.77***	-1.36 (17)	0.19	-0.46 – 0.10	0 - 0.8
ALT (TGP) (UI/L)	82.11± 128.12***	48.56± 42.60***	1.07 (17)	0.30	-32.63–99.74	10 - 35
AST (TGO) (UI/L)	88.55 ± 86.06***	78.22± 55.96***	-0.42(17)	0.67	-41.15 – 61.81	5 - 34
ALP (Alkaline phosphatase) UI/L	250.72 ± 205.12***	307.22 ± 179.99***	-1.56(17)	0.13	-132.50 – 19.50	<138
Albumin g/dL	3.39± 0.66	3.28± 0.77	0.60 (17)	0.55	-0.27 – 0.49	3.5 - 4.8
Alpha-fetoprotein (nanograms)	6455.04± 21565.83***	2570.74± 5706.40***	0.63 (13)	0.53	-9346.56 – 17115.18	<300 nanograms

***Out of clinical reference value // t-test for related samples pre-post, *P<0.05 // AST- Aspartate aminotransferase, ALT- Alanine aminotransferase, ALP- alkaline phosphatase, GGT- Gamma glutamyl transferase. // + OS actual overall survival

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Clinical characteristics, therapeutic approach, and outcomes in patients with hepatocellular carcinoma at a third-level hospital.

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Introduction and Objectives: Hepatocellular carcinoma (HCC) is the most common malignant tumor in patients with advanced cirrhosis, posing a significant challenge to the healthcare system. Treatment involves a multidisciplinary approach; however, advanced disease limits the available options. Effectiveness and outcomes can differ depending on the stage of the disease, the patient's functional reserve, and other factors. This study aims to describe the clinical characteristics, staging, treatment, and outcomes of patients with HCC at a third-level hospital

Materials and Patients: A retrospective, descriptive study of HCC patients. Demographic variables, treatment received according to the Barcelona Clinic Liver Cancer (BCLC) staging system, and treatment response according to the Response Evaluation Criteria in Solid Tumors (RECIST) were evaluated. Descriptive statistics with measures of central tendency and dispersion were performed.

Results: The study included 50 patients (20 females, 30 males; mean age 62 ±8). Etiology of cirrhosis: MAFLD (19), alcohol-related (14), Hepatitis C (11), and other causes (6). The average MELD score was 12.5 ±6.22, and the MELD-Na score was 14.7 ±5.44. BCLC staging: A (9), B (28), C (4), D (9). Eligible for treatment (30), categorized as Child-Pugh A(2), B(22), C(6). Radiological treatment (21) included Transarterial Chemoembolization (TACE) in 13 cases, ablation (4),

and a combination TACE/Ablation (4). Medical treatment with Lenvatinib (1). Combination of medical and radiological treatments (3). TACE followed by transplantation (4), and transplantation alone (1). Treatment response evaluation: Complete response (4), partial response (9), stable disease (7), and progression (8). The 3-month mortality rate was 8.3%.

Conclusions: In our group, most of the patients were males, with a relatively equal distribution between compensated and decompensated cirrhosis. MAFLD was the most prevalent etiology, and a significant portion of cases presented at an intermediate stage (BCLC B), qualifying them as candidates for treatment. The response rates to treatment were 13% for complete response and 30% for partial response. Furthermore, the calculated mortality rate at 3 months was relatively low.

Ethical statement

The protocol was registered and approved by the Ethics Committee. The identity of the patients is protected. Consentment was obtained.

Declaration of interests

None

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Characteristics and outcome of patients with liver abscess, a retrospective cohort.

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Introduction and Objectives: Liver abscess (HA) is currently a rare entity, the prevalence is low, the epidemiological transition from

amoebic to pyogenic in recent years may have modified its characteristics and outcome. Therefore, knowing its presentation, evolution, management and outcome is relevant. Describe the characteristics and outcome of patients with liver abscess

Materials and Patients: Retrospective and observational study of patients diagnosed with HA, epidemiological variables, presentation, treatment, drainage, and outcome were evaluated. Descriptive statistics were performed with measures of central tendency and dispersion

Results: Records of patients with HA were reviewed, in a period from 2018 to 2023. A total of 103 patients with HA were included, age 48.3 ± 15.7 , 70% men and 30% women, 84.5% pyogenic and 14.5% amoebic with 0.9% of deaths. 25.2% of the patients were diabetic. 42.7% were single liver abscesses, the most frequent location was segment VII in 50.4%. Regarding antibiotic treatment, 80.4% were treated with metronidazole and ceftriaxone, followed by carbapenems in 14.5%. Of the total number of patients, 73.7% required percutaneous drainage, 60.1% underwent culture, of the identified agents *E. Coli* was the most frequent in 9.7%. Only one patient died due to septic shock.

Conclusions: The most frequent etiology of HA is now pyogenic, much higher than amoebic, mortality is low, the outcome is healing without sequelae with the use of antimicrobials and percutaneous drainage.

Ethical statement

The protocol was registered and approved by the Ethics Committee. The identity of the patients is protected. Consentment was obtained.

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Detecting the risk for fatty liver, MASH, and insulin resistance using different indexes and markers of liver damage in young adults from West Mexico

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Introduction and Objectives: Previous studies conducted by our research group have demonstrated a high frequency of fatty liver and metabolic-associated steatohepatitis (MASH) in young Mexican population. Therefore, early detection of risk factors and metabolic abnormalities is important to prevent or reverse the progression to MASH. The objective of this study is to use non-invasive markers for the detection of insulin resistance (IR), the risk of fatty liver disease (FLD), liver damage, and metabolic-associated steatohepatitis (MASH) in young adult population from West Mexico

Materials and Patients: A cross-sectional study assessing the presence of IR using HOMA-IR and non-invasive assessment of the risk of fatty liver disease (FLD) (FLI ≥ 60), liver damage (HCG markers 19.6% to 58.8%), and metabolic associated steatohepatitis (MASH) (FIB-4: 1.45-3.25; APRI: ≥ 0.7 -1.0; NAFLD Fibrosis Score: > 0.675) in young adults aged 18 to 45 years. Written informed consent was obtained from all participants. The Institutional Review Board approved this study.

Results: Fifty-three participants (37 women and 16 men) with an average age of 29.53 ± 8.33 years were recruited. A 80.7% had overweight and obesity (class I, II, III), with an average waist-to-height ratio of 0.55 ± 0.09 . Additionally, 80.8% of the participants had one or more metabolic abnormalities; hypercholesterolemia (25%), hypertriglyceridemia (39.2%), hypoalbuminemia (64%), and IR (54.3%). A risk of 39.6% for NAFLD (FLI), 42.95% for liver damage (HCG markers), and 2% - 4% for MASH with intermediate hepatic fibrosis (F2-F3) and significant according to the FIB-4, APRI, and NAFLD Fibrosis Score markers, respectively, were identified.

Conclusions: A high prevalence of metabolic disorders and IR was detected, which may be related to a high risk of developing fatty liver disease (39.6%) and liver damage (42.95%), as well as MASH (2-4%) in the young Mexican adult population, suggesting the need of early prevention strategies.

Ethical statement

The protocol was registered and approved by the Ethics Committee. The identity of the patients is protected. Consentment was obtained.

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Poor correlation between HOMA index and Triglycerides/HDL-C ratio as markers of insulin resistance in adult patients with MAFLD.

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Introduction and Objectives: In children, studies have demonstrated that Triglycerides/HDL-C ratio can be a good alternative to the HOMA index for measuring insulin resistance as a more accessible and widely available method in MAFLD. However, this has not been replicated in adults. Our goal is to show the correlation that exists between the HOMA index and the Triglycerides (TG) to High-Density Lipoprotein (HDL) ratio as markers of insulin resistance in adult patients with fatty liver disease.

Materials and Patients: Descriptive and retrospective study. It included 80 adult patients with MAFLD between July 2021 and May 2023. Insulin resistance (RI) was defined as a HOMA index ≥ 2.71 or a TG/HDL-C ratio ≥ 1.36 mmol/L. The results were analyzed using measures of central tendency, dispersion, and Pearson's test.

Results: 80 patients were evaluated, with 65% of the sample corresponding to women, with a mean age of 52.5 years. 64% of patients (n=51) with MAFLD showed insulin resistance measured by HOMA-IR, while 57.7% (n=46) had a Trig/HDL-C ratio ≥ 1.36 . 8 patients who showed extreme data, possibly due to laboratory measurement error, were excluded. When applying the Pearson's test, a score of 0.25 was obtained, indicating a weak correlation between both markers (Table 1 and Figure 1).

Conclusions: In our study, we found a low correlation between the HOMA index and the Triglycerides/HDL-C ratio, suggesting that the Triglycerides/HDL-C ratio may not be a suitable marker for insulin resistance in adult patients with MAFLD. Therefore, we do not currently recommend its use in this patient population.