determined by Rho Spearman calculated with a 95% confidence interval and statistical significance p<0.05.

**Results:** We identified 50 patients (n=50) with HCC with a mean age of diagnosis 66 years (SD  $\pm$  12.91), 70% predominating in men and 88% with liver cirrhosis, the majority being Child-Pugh C (34%). The main etiology of liver cirrhosis was hepatitis C (42%) and alcohol consumption (30%); others were MASLD 4% and hepatitis B 4%. The performance status by ECOG scale was (0-2) in 70% and (3-4) in 30%. Most patients were identified in Barcelona (BCLC) D (38%) and all were diagnosed by imaging criteria or histopathology combined AFP (alpha-fetoprotein) levels. Biopsies were performed in 34% of the patients, with a predominance of moderately differentiated type (14%), identifying metastases in 8%. Mortality was 28% presenting statistical significance with AFP levels (p=0.028) and hepatic encephalopathy (p=0.004). The ECOG scale showed a positive correlation with the presence of ascites (r=.567, p=<0.001), hepatic encephalopathy (r=.337, p=0.017) and Child-Pugh Scale (r=0.615, p=<0.001).

**Conclusions:** Most cases were identified at an advanced stage, highlighting the importance of early detection, with screening programs focused on eliminating risk factors, treatment of viral hepatitis, cessation of alcohol consumption, and periodic follow-up of patients with liver cirrhosis to prevent disease progression and impacts on quality of life.

#### **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

#### **Funding**

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

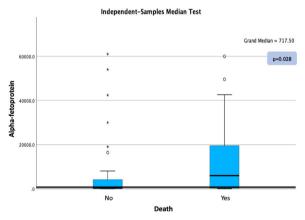


Figure 1. Relationship of AFP Levels with Mortality

**Table 1**Correlation of ECOG Performance Status Scale with Liver Decompensation

ECOG Performance Status Scale	Correlation Coefficient	p-value
Ascites	r=.567	p<0.001
Hepatic Encephalopathy	r=.337	p=0.017
Child Pugh Scale	r=.615	p<0.001

Survival of patients with hepatocellular carcinoma treated with immunotherapy experience of a third level center.

Stefanny Cornejo-Hernandez<sup>1</sup>, Mayra C. Galena-Hernández<sup>2</sup>, Víctor H. Rodríguez-González<sup>2</sup>, Wendy R.A. Martínez-Torres<sup>2</sup>, Yailin F. Velásquez-Palacios<sup>3</sup>, Ashley Ramírez-Olguín<sup>4</sup>, Juan S. García-Hernández<sup>1</sup>, Miguel A.G. Mendoza-Meléndez<sup>1</sup>, Eira Cerda-Reyes<sup>1</sup>

**Introduction and Objectives:** Hepatocellular carcinoma (HCC) ranks sixth among tumors, the third cause of death worldwide and accounts for 85-90% of primary liver tumors. Recently, the use of immunotherapy as first-line treatment offers a survival of 18 months. The objective of this study is to assess the survival and adverse effects of the different immune checkpoint inhibitor therapies in our population

**Materials and Patients:** Patients who received immunotherapy at the Central Military Hospital from January 2021 to April 2023 were included. The following were recorded: leukocytes, hemoglobin, platelets, PT, INR, BT, AST, ALT, ALP, albumin, MELD, MELD-Na, ALBI, MELD 3.0 before and after treatment, calculation of survival, progression-free time and adverse effects

**Results:** 18 patients with stage A were included 2 patients, BCLC B 6 patients and BCLC C 10 patients, age  $67.72 \pm 14.40$  years, 11 (61%) men, the following immunotherapy schemes were given: atezolizumab + bevacizumab 13 patients and 5 patients with Nivolumab. The following variables were compared before and after immunotherapy: leukocytes, hemoglobin, platelets, PT, INR, BT, AST, ALT, ALP, albumin, MELD, MELD-Na, ALBI, MELD 3.0. Without finding statistical differences (Table 1). Adverse effects were 1 patient presented with clostridiode and 2 with immune-mediated hepatitis without improvement after treatment, which required suspension of immunotherapy and initiation of second line treatment. Overall survival was 19 months and progression-free time 15 months.

**Conclusions:** The overall survival of the patients was 19 months, the adverse effects that the patients appeared were similar to those reported in the literature.

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

<sup>&</sup>lt;sup>1</sup> Department of Research

<sup>&</sup>lt;sup>2</sup> Section of Medical Oncology

<sup>&</sup>lt;sup>3</sup> Military School of Health Graduates

<sup>&</sup>lt;sup>4</sup> School of Intermedical Medicine

**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 $\pm$ DE)	tt (gl)	P<0.05	IC 95%	Reference ranges
Age	$67.72 \pm 14.40$	$69.63 \pm 14.05$	-3.15 (17)	0.006	-3.1 — -0.6	(años)
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	$9.11\pm 2.11$	$10.39 \pm 5.34$	-1.11(17)	0.28	-3.69- 1.13	
MELD NA	$9.17\pm 2.22$	$10.89 \pm 6.07$	-1.36 (17)	0.18	-4.38 - 0.93	
MELD 3.0	$10.56 \pm 2.79$	$12.06\pm 5.62$	-1.11 (17)	0.28	-4.34- 1.34	
ALBI	$-1.95 \pm 0.81$	$-1.91 \pm 0.68$	-0.14(17)	0.88	-0.560.49	
Leukocytes x103/μL	$6.15\pm 2.94$	$5.57\pm2.45$	0.87 (17)	0.39	-0.80- 1.95	5 - 10
Hemoglobin g/dL	$13.02 \pm 2.67$	$13.02 \pm 2.77$	0.00(17)	1.00	-1.36 - 1.36	13.5 – 18
Platelet x10 $^9/\mu$ L	265.59± 80.79***	$169.00 \pm 80.80^{***}$	1.54 (16)	0.14	-36.24- 229.41	150 – 450
PT (seconds)	$12.95 \pm 4.11$	$11.41 \pm 3.63$	1.13 (17)	0.27	-1.32- 4.40	11.0 – 13.5
INR	1.94± 3.34***	$1.14 \pm 0.22^{***}$	1.01 (17)	0.32	-0.87 – 2.48	≤1
Total Bilirrubin (mg/dL)	1.27± 0.63***	1.58± 1.26***	-1.24 (17)	0.22	-0.82 - 0.21	0.2 - 1.2
Direct Bilirrubin (mg/dL)	$0.44 \pm 0.43^{***}$	$0.57 \pm 0.69^{***}$	-0.83 (17)	0.41	-0.45- 0.19	0 - 0.2
No Direct Bilirrubin (mg/dL)	$0.83 \pm 0.52^{***}$	$1.01\pm0.77^{***}$	-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)	$88.55 \pm 86.06^{***}$	78.22± 55.96***	-0.42(17)	0.67	-41.15 – 61.81	5 - 34
ALP (Alkaline phosphatose) UI/L	250.72 ± 205.12***	307.22 ± 179.99***	-1.56(17)	0.13	-132.50 – 19.50	<138
Albúmin 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	<b>-9346.56</b> – <b>17115.18</b>	<300 nanograms

<sup>\*\*\*</sup>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.

Laura V. Cupil-Escobedo<sup>1</sup>, Cristian Y. Sánchez-Sánchez<sup>1</sup>, Víctor M. Páez-Zayas<sup>2</sup>, Gabriela Rangel-Zavala<sup>1</sup>, Ernesto J. Medina-Ávalos<sup>1</sup>, María F. Higuera-De La Tijera<sup>1</sup>, José L. Pérez-Hernández<sup>1</sup>

**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  $62 \pm 8$ ). Etiology of cirrhosis: MAFLD (19), alcohol-related (14), Hepatitis C (11), and other causes (6). The average MELD score was  $12.5 \pm 6.22$ , and the MELD-Na score was  $14.7 \pm 5.44$ . 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.

María C. Alegría-Ovando, María F. Higuera-de la Tijera, José L. Pérez-Hernández

Department of Gastroenterology, General Hospital of Mexico "Dr. Eduardo Liceaga", Mexico City, Mexico

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

Department of Gastroenterology, General Hospital of Mexico "Dr. Eduardo Liceaga", Mexico City, Mexico
Department of Organ Transplantation, General Hospital of Mexico "Dr. Eduardo Liceaga", Mexico City, Mexico