HEPATOCELLULAR CARCINOMA IN VERACRUZ: A SURVEILLANCE COMPARISON BETWEEN TREATMENTS

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Introduction and Objectives: In Mexico, hepatocellular carcinoma (HC) represents >90% of primary hepatic tumors. The diagnosis is determined by imaging findings (CT or MR). A biopsy is necessary for specific situations. The staging method is the Barcelona classification (BCLC) which considers hepatic biomarkers, the tumor burden and the performance status. Treatment options include transplantation, liver resection (LR), radiofrequency ablation (RFA), transarterial embolization (TACE/TAE) and systemic treatment (ST). Nonetheless, there are few surveillance studies in Mexico. The study aims to describe the surveillance of HC subjects after different therapeutic approaches.

Materials and Methods: Descriptive and retrospective study with a database including 130 patients diagnosed with HC by imaging findings (or biopsy if needed) between 2005 and 2021 in Veracruz. For statistical analysis, surveillance data was first summarized by descriptive statistics and 5-year-overall survival rates (5OS). Subsequently, a comparison of surveillance between therapeutic options was made by Log-Rank, Cox regression and $\chi 2$. We considered statistical significance at p<0.05.

Results: A total of 130 patients were diagnosed with HC,128 patients were analyzed after 2 exclusions due to missing data, 45 (35%) of them died during the follow-up. The distribution of descriptive data is detailed in Table 1. We observed longer accumulated overall surveillance in patients who underwent LR (5OS: 73%), followed by RFA (5OS: 28%), $\chi 2$: 10.7, p=0.02. When analyzing data by BCLC we found a poor difference in surveillance between treatments (p>0.05). Recurrence of the tumor was only observed in stage B: 5 cases after LR (29.4%), and 2 cases after RFA (22.2%), $\chi 2=12.084$ p=0.017. The mean time for recurrence detection was 19 months and five months for LR and RFA, respectively. Discussion: This analysis showed higher accumulated surveillance for patients with LR, followed by RFA. Furthermore, Log-Rank curve of RFA showed a pronounced inclination of surveillance around the 25th month, after which it reached a plateau and deceleration until the 75th month. However, five year-OSr seemed to be lower than in other studies.

Conclusion: Our results suggest that LR is a feasible treatment alternative. In the meantime, RFA seems a worthy option when patients are not candidates for LR, showing promising results.

The authors declare that there is no conflict of interest.

Table 1
Surveillance time according staging

		χ^2	p	Tx	n 128 (%)	Surveillance (Months)			
						M	SD	Me	SD
Barcelona Classification	**A**	**3.0**	**0.3**	**NT**	*4 (10.8)*	10	3	10	6
				LR	*12 (32.4)*	49	14	24	50
				RFA	*8 (21.6)*	14	4	12	11
				ST	*13 (35.1)*	11	3	9	10
				Global	*37 (100)*	24	6	10	34
	B	**3.2**	**0.5**	**NT**	*16 (21.9)*	7	1	7	6
				LR	*18 (24.7)*	34	8	25	35
				RFA	*11 (15.1)*	26	7	15	24
				ST	*25 (34.2)*	12	2	11	9

(continued)

Table 1 (*Continued*)

	χ^2	p	Tx	n 128 (%)	Surveillance (Months)			
					M	SD	Me	SD
			TACE	*3 (4.1)*	7	3	6	5
			Global	*73 (100)*	18	3	11	23
C	**5.9**	**0.1**	**NT**	*7 (53.8)*	5	2	4	4
			LR	*1 (7.7)*	3	N/A	3	N/A
			RFA	*1 (7.7)*	10	N/A	10	N/A
			ST	*4 (30.8)*	23	6	25	12
			Global	*13 (100)*	11	3	7	11
D	N/A	N/A	**NT**	*5 (100)*	5	N/A	5	2
			Global	*5 (100)*	5	N/A	5	2

HEPATOCELLULAR CARCINOMA: CLINICAL AND EPIDEMIOLOGICAL FEATURES IN VERACRUZ

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Introduction and Objectives: Hepatocellular carcinoma (HCC) is the most frequent liver tumor and it occupies sixth place of the malignant neoplasms worldwide. In the last decades, In Mexico has been reported an increase of 95% in incidence and 14% in mortality, becoming the second most lethal neoplasm after pancreatic cancer. Few studies describe the HCC epidemiological behavior in our population.

Objective: To describe the clinical and epidemiological features of HCC in patients from Veracruz city.

Material and methods: A descriptive and retrospective study was done from a patient database with diagnosed HCC by imaging and, if required, with a biopsy confirmation between 2005 and 2021 in Veracruz. Central tendency and dispersion measures were done for the analysis.

Results: 130 patients with HCC were studied, the mean diagnosis age was 66.9 ± 11 (29-62 rate), with a female genre lead 1.2:1. Eighty-six patients (66.2%) had cirrhosis at the diagnosis, 32 (24.6%) were secondary to chronic alcohol consumption, 8 (6.2%) with hepatitis C infection, 20 (15.4%) MAFLD/ Cryptogenic and 3 (2.3%) with hepatitis B infection. The comorbidities reported were overweight in 58 patients (43.9%), obesity 19 (14.4%), high blood pressure 54 (40.2%) and diabetes mellitus 51 (38.6%). The most frequent biochemical disturbance was hyperbilirubinemia (1.27 ± 1.26). The rest f biochemical features are described in table 1. Sixty-six patients (50%) were found with Child-Pugh A with a MELD score of 9.86 ± 3.0. In this stage, we found 74 patients (56.9%) with Barcelona B, 80% had a lone tumor, the mean tumoral size was 7.13 ± 3.7 cm. 69.2% of patients had a tumoral size greater than 5 cm at the diagnosis.

Discussion: Our results show that the HCC behavior is similar to the reported in previous Mexican studies, predominating in patients with advanced liver injury and tumor outside criteria of local treatment at the diagnosis. The high frequency of comorbidities associated with metabolic syndrome is remarkable as one of the main risk factors with chronic C virus infection.

Conclusion: HCC in Mexico has been increasing. It shows similar epidemiological features with the reported in other populations due to its relationship with metabolic risk. Early screening in high-risk patients results in greater resectability and survival.

The authors declare that there is no conflict of interest.