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Characterization of hepatocellular carcinoma in Mexico☆

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Abstract

Introduction and aims: In Mexico, complications of cirrhosis are the third leading cause of death in adult males. In recent decades, the incidence of hepatocellular carcinoma has increased worldwide. The aim of this study was to determine the characteristics of patients with hepatocellular carcinoma at two Mexican tertiary care hospitals.

Material and methods: An observational, cross-sectional, retrospective study was conducted between January 2008 and April 2014. We described the clinical features, epidemiologic characteristics, diagnosis, and treatment of patients with hepatocellular carcinoma.

Results: One hundred and forty-eight patients were included. There was a predominance in males and disease manifestation in the sixth decade of life. Liver disease was associated in 87% of subjects and was mainly attributed to alcohol abuse, hepatitis C infection, and nonalcoholic steatohepatitis. Sixty percent (60%) of cases were classified as Child-Pugh stage A cirrhosis, 75.5% harbored a single tumor at diagnosis, 27.7% had normal alpha-fetoprotein values, and only 39.2% of patients with known liver disease were under a surveillance program. Tumors were larger than 5 cm at diagnosis in 64.3% of patients, and well-differentiated lesions were most frequently detected. Over 70% of patients were diagnosed at a non-curative stage. By the 2014 study cutoff point, 77.7% of patients had died. Treatment was determined by the means available at each center and followed the therapeutic recommendations in international guidelines in 45.3% of cases, clearly impacting survival.

Conclusions: Better surveillance methods are required to diagnose the disease at its early stages, but treatment still requires individual adaptation to each center's available resources.
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Caracterización del carcinoma hepatocelular en México

Resumen
Introducción y objetivos: En México, las complicaciones de la cirrosis son la tercera causa de muerte en adultos de sexo masculino. En años recientes el carcinoma hepatocelular ha demostrado incremento en su incidencia global. El objetivo de este estudio fue determinar las características del carcinoma hepatocelular en dos hospitales mexicanos de tercer nivel.
Material y métodos: Estudio observacional, transversal y retrospectivo, de enero de 2008 a abril de 2014; se describen las características clínicas y epidemiológicas, así como el diagnóstico y tratamiento, de 148 pacientes con carcinoma hepatocelular.
Resultados: El carcinoma hepatocelular se presentó predominantemente en el sexo masculino y en la sexta década de la vida, asociado a enfermedad hepática en el 87% de los casos; la etiología más frecuente fue la cirrosis secundaria a alcohol, el virus de la hepatitis c y la esteatohepatitis no alcohólica. Al diagnóstico, el 60% estaban en Child-Pugh A, el 75.5% presentaron tumor único, y el 27.7% tuvieron la alfafetoproteína normal. El 39.9% de los pacientes con enfermedad hepática conocida se encontraban bajo un programa de vigilancia. El 64.3% de pacientes tuvieron tumores más grandes de 5 cm al momento del diagnóstico, y las lesiones bien diferenciadas fueron las detectadas con mayor frecuencia. Más del 70% de los pacientes se diagnosticaron en una etapa no curativa. Al llegar al punto de corte en el 2014, el 77.7% de los pacientes ya habían fallecido. El tratamiento se determinó de acuerdo con la disponibilidad de cada centro y las guías internacionales se siguieron en el 45.3% de los casos, impactando en la supervivencia.
Conclusiones: Se requiere mejorar el escrutinio para detectar la enfermedad en etapas tempranas; sin embargo, se debe adaptar el tratamiento dependiendo de la experiencia en cada centro.
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Introduction

The incidence of hepatocellular carcinoma (HCC) has progressively increased worldwide in recent decades and the main risk factor for its development is the presence of underlying cirrhosis. Hepatitis B and/or C viral infection and alcohol abuse are among the major pathologies leading to cirrhosis, and nonalcoholic steatohepatitis (NASH) is now considered an emerging and important etiology of cirrhosis and HCC.[1–3] Various algorithms have been used for the surveillance and treatment of each disease, and all are fully endorsed by several international associations.[4,5] In Mexico, there is currently insufficient epidemiologic data on HCC cases and their relation to the underlying liver disease, as well as a lack of information on tumor characteristics at diagnosis, on management, and on survival. The aim of this study was to characterize a cohort of 148 patients diagnosed with HCC from two tertiary care centers in Mexico.

Materials and methods

Patients diagnosed with HCC between January 2008 and April 2014 at the following two Mexican tertiary care hospital centers were included in the study: the *Unidad Médica de Alta Especialidad no. 25, Instituto Mexicano del Seguro Social, Monterrey Nuevo León* (UMAE 25) (Northern Mexico) and the *Instituto de Seguridad Social del Estado de México y Municipios (ISSEMyM), Toluca, Estado de México* (Central Mexico). The study protocol was approved by the Ethics and Research Committee of the *UMAE 25 IMSS* and the Ethics Committee of the *ISSEMyM*.

The documented epidemiologic data included: etiology of the underlying liver disease, liver disease stage at diagnosis, and the HCC stage according to the Barcelona Clinic Liver Cancer (BCLC) staging classification. Patients were followed from January 2008 to April 2014, the study cut-off point. Surveillance consisted of liver ultrasound images