

## Hepatology Highlights

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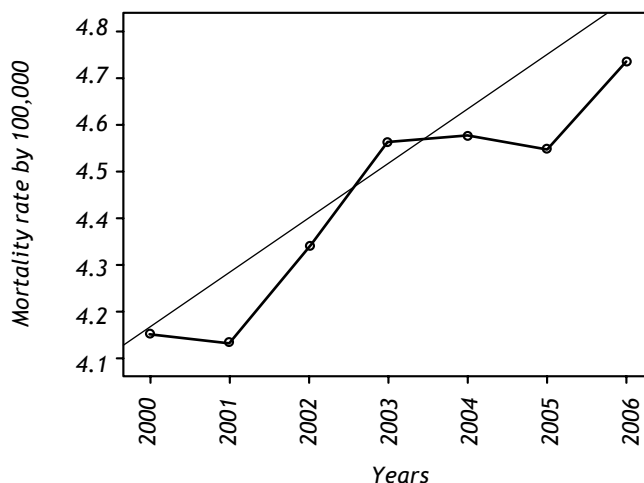
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**Fassio, et al.** Hepatocellular carcinoma (HCC), the most common primary liver cancer around the world, is one of the most important cancer-related causes of death in developing countries. It has been estimated that the incidence of this disease has been arising due to several regional and genetic factors in western countries. Demographical studies carried out in the United States (US) have shown that Hispanic population have higher rates of chronic liver diseases including an increase in the incidence and mortality of HCC specially among Hispanic women.<sup>1,2</sup>

The aim of this study was firstly to determine the underlying cause of HCC among patients in Latin America and also to evaluate the staging of HCC and the percentage of patients receiving specific treatment. This is a prospective multicentre study organized by Latin American Association for the Study of the Liver, involving 240 patients of 9 Latin American countries for a period of 18 months. The authors found a higher prevalence of HCC in men than in women; the median age was 64 years; 85.4% of patients had underlying cirrhosis. Furthermore 38% of the patients had Hepatitis C virus (HCV) chronic infection, 28% chronic alcoholism and 14% Hepatitis B virus (HBV) chronic infection. HCV, alcohol, cryptogenic cirrhosis and HBV were the most common etiologies for HCC. Interestingly, male patients had higher prevalence of alcohol intake associated to other etiological factors ( $p < 0.001$ ). Regarding to the Okuda classification, stage 1 was the most prevalent with 117 cases; and according to the Barcelona-Clinic Liver Cancer (BCLC) staging system, stage A was the most common, finding significant differences between the proportions of patients in the two classifications ( $p < 0.01$ ). In regards to treatment, only 68.3% of patients received specific therapy, most of them, transarterial che-

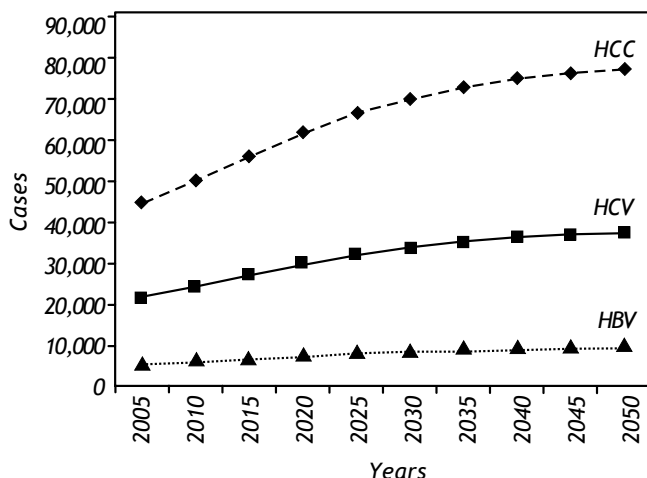
moembolization. One of the study limitations is the selection bias since the studied population was restricted to tertiary medical centers, in addition most of the patients came from only four different countries, mostly from South America, and therefore the sample was not comparable between them.

Interestingly, Méndez-Sánchez, et al. showed in one study that in Mexican population, alcohol consumption, HCV infection and cryptogenic cirrhosis were the main causes of liver cirrhosis and in a subsequent study found the same causes for HCC, similar to what has been reported in the US, Japan, Australia, France and Italy. They also found higher rates of incidence in men than in women, although



**Figure 1.** The specific-cause mortality rate of HCC in Mexican patients. The figure shows a significant change of 14% corresponding to an increase in rate from 4.16 per 100,000 inhabitants in 2000 to a rate of 4.74 per 100,000 inhabitants in 2006 (From Méndez-Sánchez N, Villa AR, Vázquez-Elizondo G, Ponciano-Rodríguez G, Uribe M. Mortality Trends for liver cancer in Mexico from 2000 to 2006. *Ann Hepatol* 2008; 7(3): 226-229).

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**Figure 2.** Trends in the prevalence of liver chronic disease in Mexico (From: Méndez-Sánchez N, Vásquez-Fernández, Zamora-Valdés D, Uribe M. Sorafenib, a systemic therapy for hepatocellular carcinoma. *Ann Hepatol* 2008; 7(1): 46-51).

the increase in the last group was greater in the last years. In addition, mortality is higher in subjects over 60 years than in younger patients<sup>2</sup> (Figures 1 and 2).<sup>3</sup>

In regards to the staging system, although the Okuda classification has been the most used in the past decade, nowadays is not the most complete since its lower predictive capacity and the lack of treatment strategy. It has been made use of other classification systems, but only three of them have been validated in different cohorts of patients, one of them, the BCLC has been suggested to be the most complete due to the contemplated variables and the treatment algorithm proposed.<sup>4</sup>

The increasing incidence and mortality of HCC is becoming one of the most important public health

issues in western countries. Obesity and diabetes mellitus type 2 are some of the most important risk factors in the progression of chronic liver diseases to HCC and since the Hispanic population have an increased risk of developing metabolic syndrome complications, it is one of the most predisposed ethnical groups to develop HCC.<sup>5</sup>

Only a few studies have contemplated Latin American countries, Franceschi et al studied the worldwide prevalence of HBV and HCV in HCC patients, but the only Latin American countries included were Brazil, Peru and Mexico,<sup>6</sup> therefore, the study published in the current issue is the first one carried out in this geographic area. These authors encourage all the Latin American Association for the Study of the Liver members to have a more active participation since further research on this topic is needed.

## REFERENCES

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