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## HEPATOLOGY HIGHLIGHTS

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## **Hepatology highlights**

Beatriz Barranco-Fragoso, \* Nahum Méndez-Sánchez\*\*

\* Department of Gastroenterology, National Medical Center "20 Noviembre". Mexico City. Mexico. \*\* Liver Research Unit, Medica Sur Clinic & Foundation. Mexico City, Mexico.

Schaeffer S, et al. Reasons for HCV non-treatment in underserved African Americans: implications for treatment with new therapeutics

**Schaeffer S, et al.** Hepatitis C is a major public health and economic concern in the United States. It has been also suggested that the true prevalence between Americans in particular African Americans, is higher compared with other ethnic/ racial groups. 1 Regarding with the treatment chronic hepatitis C. Historically, the response rates with interferon-based therapy among African Americans is lower compared with Caucasian patients.<sup>2</sup> Interestingly, in a well-characterized cohort of the 308 patients with HCV, a large proportion (40%) with IL28B polymorphisms associated with response to therapy were ineligible for treatment because of contraindications.3

In the current issue Schaeffer and Khalili tried to identify reasons for HCV non-treatment among underserved African Americans in a large safety net system. They analyzed the medical records of HCVinfected African Americans at San Francisco General Hospital from 2006-2011 who did not receive HCV treatment. The investigators found that among 118 patients, 42% were treatment ineligible, 18% treatment eligible, and 40% were undergoing work-up to determine eligibility. The reasons for treatment ineligibility were medical (54%), non-medical (14%), psychiatric (4%), or combined (28%). When controlling for age and sex, active/recent substance abuse (OR 6.65, p = 0.001) and having two or more medical comorbidities (OR 3.39, p = 0.005) predicted treatment ineligibility.

Probably the main limitation of the present study is that it was a retrospective one and the small sample size. However, this is the first study that investigated reasons for HCV non-treatment among African Americans in a safety net healthcare system. Also it is important to mention that this subject has been elegant analyzed by Saab, et al.4 in a systematic review. According with the results of such analysis those investigators have suggested improvements in access to screening and the antiviral treatment. In agreement with them we believe that at hepatitis C infection in African Americans is clearly a public health problem and a serious economic burden in the United States.

Cheng YL, et al. Anti-hepatitis C virus seropositivity is not associated with metabolic syndrome irrespective of age, gender and fibrosis

**Cheng YL**, *et al*. It has been suggested a close relationship among HCV infection and type 2 diabetes. In an interesting study, Mehta SH, et al. have

Correspondence and reprint request: Prof. Nahum Méndez-Sánchez, M.D., MSc, PhD, FACG, AGAF.

Liver Research Unit, Medica Sur Clinic & Foundation.

Puente de Piedra 150, Col. Toriello Guerra, Mexico City, Mexico.

Tel.: +525-554247200 (4215). Fax: +525-55666-4031

E-mail: nmendez@medicasur.org.mx

been evaluated this relationship in a representative sample of the general population of the United States through the Third National Health and Nutrition Examination Survey (NHANES III).<sup>5</sup> They found among persons 40 years of age or older, that those with HCV infection were more than 3 times as likely as those without HCV infection to have type 2 diabetes. Furthermore, metabolic syndrome is a risk factor for diabetes mellitus. Subjects with metabolic syndrome have higher rates of insulin resistance and therefore are at a higher risk of developing type 2 diabetes mellitus.<sup>6</sup> It is estimated that one-quarter of US adults 20 years or older meet the diagnostic criteria for metabolic syndrome. Also it is known that there are some ethnic differences in the prevalence of metabolic syndrome ranging from a low of 13.9% in African-American men to a high of 27.2% in Mexican-American women. Interestingly those ethnic groups the rates of hepatitis C and type 2 diabetes mellitus are high.

Cheng YL, et al. in the present study investigated the correlation between metabolic syndrome and anti-HCV seropositivity in Taiwan. This study enrolled consecutive subjects who had received health check-up services at Taipei Veterans General Hospital from 2002 to 2009. Among the 30616 subjects enrolled in this study, the prevalence of positive anti-HCV serology was 2.7%, and 28.8% were diagnosed with metabolic syndrome. By multivariate analysis, metabolic syndrome was associated with higher body mass index, older age, male sex, a higher level of alanine aminotransferase, gammaglutamyltransferase, platelet count and the presence of fatty liver whereas anti-HCV seropositivity was not an independent variable for metabolic syndrome. With further stratified the subjects by age and sex, and there was still no significant difference in HCV status between those with and without metabolic syndrome. Moreover, the stage of liver fibrosis represented by aspartate aminotransferase to platelet ratio index was also not correlated with metabolic syndrome in the subjects with anti-HCV seropositivity.

How can we interpreted the results of the present study? Firstly, authors recognized that this study has some limitations and probably the most important is the dataset that investigators used did not document medication uses. Which may have had little influence on the results. Also a recent study carried out in Taiwan has been suggested that the current criteria of metabolic syndrome give equal weight to each component and apply mostly the same cut-off values to all ages. The authors suggested that an internal consistency of metabolic syndrome was questionable. Given equal weight to each component and used the same cut-off values for the subjects of all age groups in both sexes need to be reconsidered.

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