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EDITORIAL

Metabolic liver disease: A new preventable pandemic☆

La enfermedad hepática metabólica: una nueva pandemia prevenible

Metabolic (dysfunction)-associated fatty liver disease (MAFLD), formerly known as nonalcoholic fatty liver disease, is an emerging disease of high prevalence and the main cause of chronic liver disease worldwide[1]. Despite the importance of this disease, its prevalence is underestimated because of its asymptomatic nature. In addition, the data vary, according to the method utilized for its diagnosis. Liver biopsy, which is the gold standard for diagnosing MAFLD, is an invasive method that is not exempt from complications, and therefore, cannot be used as a screening method.

MAFLD has the capacity to progress to liver cirrhosis and hepatocellular carcinoma. In addition, it is a multisystemic disease that affects different extrahepatic organs and regulating pathways. It is recognized as the hepatic component of metabolic syndrome (MetS), and insulin resistance is the pathophysiologic mechanism the two diseases have in common. MAFLD has become a growing public health problem, with its prevalence increasing, parallel to the obesity and type 2 diabetes mellitus (DM2) pandemics.

In the cross-sectional study by Bernal-Reyes et al.[2], 585 volunteers were analyzed, utilizing FIB-4 and abdominal ultrasound, and FibroScan® was carried out on the subjects that had signs suggestive of fibrosis. The prevalence of MAFLD was 41.3%, higher than that reported in the most recent studies on global prevalence (25%)[3]. Prevalence, indeed, varies in relation to the population studied and ethnicity, and is higher in Hispanics (45%)[4]. That ethnic variation has not been fully explained, but is likely to be a combination of genetic and environmental factors. Furthermore, MAFLD was more prevalent in men above 50 years of age, that presented with poor dietary habits and a sedentary lifestyle. Just as has been shown in previous studies[5], the risk factors for MAFLD were male sex, obesity, MetS, and elevated ALT. Reciprocally, patients with MAFLD and significant fibrosis have been shown to have a higher risk for developing DM2 and high blood pressure[6]. The patients with MAFLD had a greater predominance of visceral fat, which has been associated in other studies with the presence of liver fibrosis[7]. Lastly, as to be expected, the correlation between FIB-4 and FibroScan® was low ($r = 0.23$ and AUROC 0.6), given that they are complementary tests that should be sequentially performed. The study described herein followed the recommendations recently proposed by the EASL[8] of selecting an at-risk population, and in those with an elevated FIB-4, carrying out the study of fibrosis through FibroScan®.

The prevalence of MAFLD, even in a Mexican population (university worker volunteers) with a higher social and educational level than the general population, was very high. The close relation of MAFLD to MetS was confirmed, and the former could be considered the hepatic part of a systemic disease with important clinical repercussions. In some countries, it has already become the main cause of end-stage liver disease, cancer, and the need for liver transplantation[3].

But we must not forget that MAFLD is a preventable disease. The public health authorities in Mexico should carefully read the study by Bernal-Reyes et al. to establish adequate prevention measures, and thus avert a tsunami of diseases in the coming years.

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Conflict of interest

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References

1. Eslam M, Newsome PN, Sarin SK, et al. A new definition for metabolic dysfunction-associated fatty liver disease: an international expert consensus statement. J Hepatol. 2020;73:202–9, http://dx.doi.org/10.1016/j.jhep.2020.03.039.
2. Bernal-Reyes R, Icaza-Chávez ME, Chi-Cervera LA, et al. Prevalencia y características clínico-epidemiológicas de una población mexicana con MAFLD (metabolic [dysfunction] associated fatty liver disease): un estudio en población abierta. Rev Gastroenterol Mex. 2022, http://dx.doi.org/10.1016/j.rgmx.2021.09.002. Available online 7 May 2022.
3. Younossi Z, Anstee QM, Marietti M, et al. Global burden of NAFLD and NASH: trends, predictions, risk factors and prevention. Nat Rev Gastroenterol Hepatol. 2018;15:11–20, http://dx.doi.org/10.1038/nrgastro.2017.109.
4. Brea A, Puzo J. Non-alcoholic fatty liver disease and cardiovascular risk. Int J Cardiol. 2013;167:1109–17, http://dx.doi.org/10.1016/j.ijcard.2012.09.085.
5. Caballeria L, Pera G, Auladell MA, et al. Prevalence and factors associated with the presence of nonalcoholic fatty liver disease in an adult population in Spain. Eur J Gastroenterol Hepatol. 2010;22:24–32, http://dx.doi.org/10.1097/MEG.0b013e32832fcdf0.
6. Ampuero J, Aller R, Gallego-Durán R, et al. HEPAmet Registry. Significant fibrosis predicts new-onset diabetes mellitus and arterial hypertension in patients with NASH. J Hepatol. 2020;73:17–25, http://dx.doi.org/10.1016/j.jhep.2020.02.028.
7. Hernández-Conde M, Llop E, Fernández-Carrillo C, et al. Estimation of visceral fat is useful for the diagnosis of significant fibrosis in patients with non-alcoholic fatty liver disease. World J Gastroenterol. 2020;26:6658–68, http://dx.doi.org/10.3748/wjg.v26.i42.6658.
8. European Association for the Study of the Liver. Electronic address, easloffice@easloffice.eu, et al. EASL Clinical Practice Guidelines on non-invasive tests for evaluation of liver disease severity and prognosis - 2021 update. J Hepatol. 2021;75:659–89, http://dx.doi.org/10.1016/j.jhep.2021.05.025.

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