About the article entitled "Nonalcoholic fatty liver disease in patients with type 2 diabetes: a review article"

Kenny Brando Arias Chipana* [1,a]

Dear Editor:

I have read with great interest the article entitled "Nonalcoholic fatty liver disease in patients with type 2 diabetes: a review article" [(1)] by Gonzalo Miranda, published in volume 23 issue 2 of the *Horizonte Médico (Lima)* journal. The article concludes that the high prevalence of type 2 diabetes mellitus (T2DM) and nonalcoholic fatty liver disease (NAFLD) could lead to an alarming public health problem in the future because of the consequences in terms of mortality and morbidity associated with these diseases. For that reason, it is deemed appropriate to reflect on the subject, taking into account its great importance.

First of all, it is important to highlight that NAFLD is a major public health problem due to its rapid prevalence in Western countries, which accounts for 25 % worldwide. Moreover, NAFLD is becoming an increasingly common chronic liver disease in Western industrialized countries, especially in patients with central obesity, T2DM, dyslipidemia and metabolic syndrome [(2)]. This rising incidence poses serious concern because of the severe and potentially life-threatening consequences associated with these diseases.

Second, it is key to highlight the importance of an assessment of the degree of fibrosis among patients with NAFLD, due to its close relationship with an increased cardiovascular risk and the worst prognosis of liver complications. NAFLD has been found to be associated with arterial hypertension, arterial stiffness, atherosclerosis, coronary artery disease, atrial fibrillation and aortic valve sclerosis. Advanced liver fibrosis has been identified as a crucial prognostic factor for end-stage liver disease and cardiovascular and overall mortality [(3)]. Therefore, assessment of liver fibrosis among patients with NAFLD is essential for optimal medical care as well as for making informed decisions about the management of these patients.

Third, treatment of NAFLD is mainly based on lifestyle changes, as they are currently the most effective therapeutic approach. Weight loss has been shown to improve liver biochemical tests, liver histology, serum insulin levels and quality of life in patients with NAFLD. However, it is important to consider that weight loss can be difficult to achieve and maintain in the long term [(2,3)].

In this regard, it is encouraging to note that several drugs used for the treatment of T2DM have yielded positive results on NAFLD biomarkers. Since there is a close association between NAFLD and T2DM, these pharmacological agents may play an important role in the management of this liver disease [(4)]. However, it is important to take into account that there is currently no optimal and specific pharmacological treatment available for NAFLD. Therefore, the need for further research and development of more effective therapeutic options should be emphasized.

In summary, the high prevalence of NAFLD and its relationship with T2DM pose an alarming public health problem due to the severe consequences in terms of mortality and morbidity associated with these diseases. The assessment of liver fibrosis, emphasis on lifestyle changes and exploration of promising pharmacological treatments are key areas to address this growing health problem. Further research and interdisciplinary collaboration are required to fully understand the underlying mechanisms, improve management strategies and develop more effective therapies.

Author contributions: The author declares compliance with authorship criteria recommended by the *Horizonte Médico (Lima)* journal (RHM).

Funding sources: The article was funded by the author.

Conflicts of interest: The author declares no conflicts of interest.

1 Universidad Peruana Cayetano Heredia, Alberto Hurtado School of Medicine. Lima, Peru.
[a] Student of Human Medicine.
*Corresponding author.

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Corresponding author:
Kenny Brando Arias Chipana
Address: Av. Manuel Suarez Pinzas 353. Lima, Perú.
Telephone: +51 955 500 969
Email: kenny.arias@upch.pe

Reception date: July 24, 2023
Evaluation date: July 25, 2023
Approval date: July 26, 2023

ORCID iD
Kenny Brando Arias Chipana **https://orcid.org/0009-0005-0984-7800**