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Strategies for a two-step liver fibrosis assessment in clinical practice

To the Editor:

We read with great interest the article by Mansour *et al.*[1] which proposes to incorporate a 2-step fibrosis assessment (Fibrosis-4 [FIB-4] score then vibration controlled transient elastography [VCTE]) into routine annual care of patients with type 2 diabetes (T2DM) in primary care clinics. The authors conclude that this strategy "… significantly improves the identification of advanced liver disease in patients with T2DM" when compared to current standard of care. Indeed, the systematic screening for non-alcoholic fatty liver disease (NAFLD) in patients with T2DM is recommended by the European Association for the Study of the Liver (EASL)[2] and the American Diabetes Association (ADA)[3] and the use of non-invasive scoring systems has been shown to be the simplest and most accurate strategy to identify patients at high risk of advanced fibrosis.[4] In line with the authors, we are confident that this management approach has great potential to improve clinical care.

Primary care providers (PCPs) and diabetologists represent the most important link in the chain of management of patients with NAFLD since they are the first medical point of contact for this population. However, patients with T2DM are complex, with multiple comorbidities, and can be a significant burden on

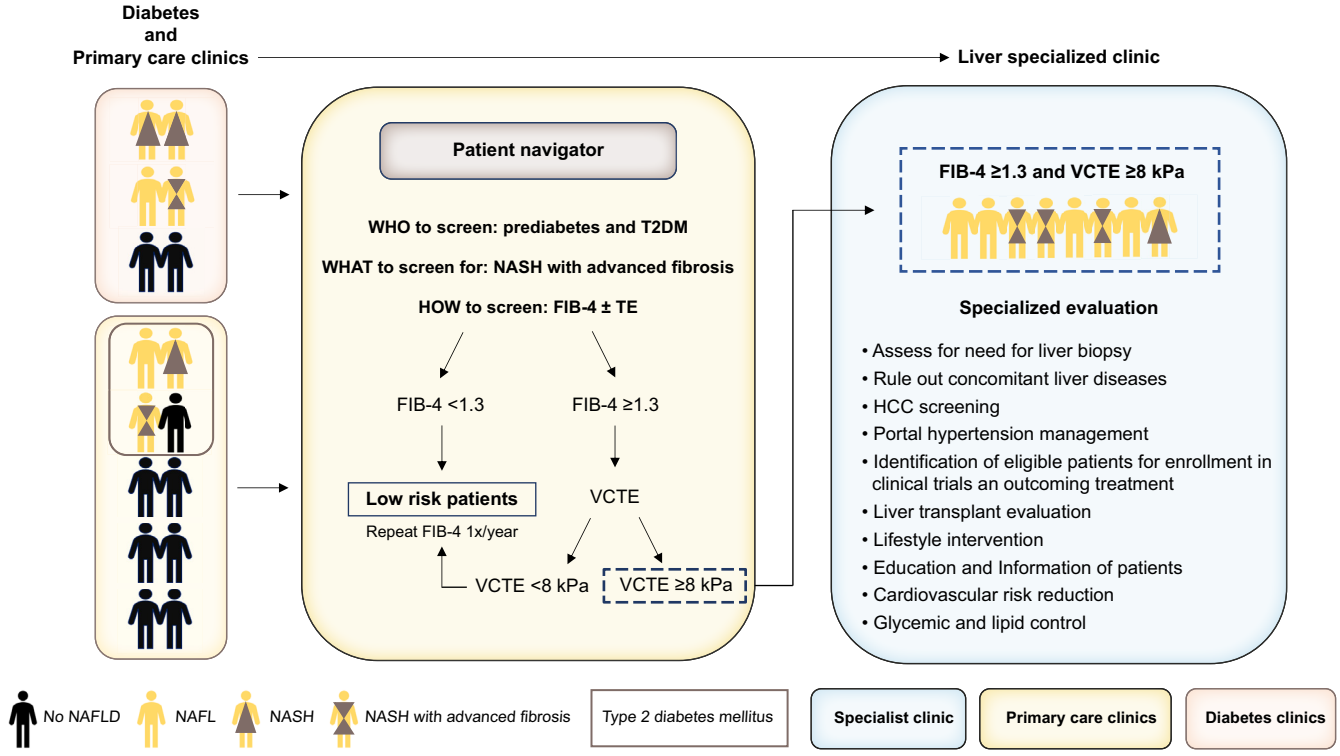

Fig. 1. Stepwise approach for screening, risk stratification and referral of NAFLD patients between primary care and diabetic clinics, and liver specialists. The proposed algorithm involves a first step annual FIB-4 score (FIB-4) followed by VCTE for those with indeterminate or high-risk score (FIB-4 ≥1.3). Low risk patients (FIB-4 <1.3 or VCTE <8 kPa) can be followed-up by primary care providers for lifestyle changes and yearly calculation of FIB-4, while high risk patients (FIB-4 ≥1.3 and VCTE ≥8 kPa) should be referred to liver specialized clinics for further assessment and evaluation. NAFLD, non-alcoholic fatty liver disease; NAFL, non-alcoholic fatty liver; NASH, non-alcoholic steatohepatitis; FIB-4, Fibrosis-4 index; VCTE, vibration controlled transient elastography. Adapted from reference 7.

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primary care and diabetology clinics that are already overburdened.[5,6] Hence, the optimal screening program should be simple and easily integrated into an existing workflow to improve long-term adherence and implementation.

We have recently published a workflow[7] which proposes to incorporate the calculation of the FIB-4 into the already existing checklists used in the diabetic population. More specifically, we proposed the addition of platelet count to the checklist included in the 2020 guidelines published by the ADA – which included baseline and yearly transaminases – to allow the calculation of the FIB-4 and identify patients at high risk of advanced fibrosis. An indeterminate or high-risk score would then prompt additional evaluation with TE (Fig. 1).

Moreover, we propose the inclusion of a patient navigator into the care system of these patients. A patient navigator would co-manage the checklist with the PCP to increase adherence to screening for multiple complications of diabetes including non-alcoholic steatohepatitis (NASH), retinopathy, nephropathy, diabetic ulcers and ensure follow-up with subsequent testing and referral to specialists. Specifically in the screening for NASH, the patient navigator would have multiples functions: i) flag patients who need labs for the calculation of FIB-4; ii) identify patients with indeterminate or high-risk FIB-4 scores (FIB-4 ≥1.3) who need referral to a specialized liver center and/or for VCTE; iii) follow-up to ensure that patients have undergone TE or had a specialist appointment. In our center, despite incorporating an automatic calculator into our electronic medical system, still roughly 40% of patients were missing data to calculate FIB-4, which highlights the key role of a patient navigator in prompting the PCP to order the labs needed. The inclusion of a patient navigator in the management of complex patients, such as patients with chronic liver diseases[8] or diabetic patients[9] has already been shown to be beneficial[10] with an improvement of care, glycemic control, and better patient engagement.

In conclusion, we agree with the authors on the importance of incorporating a screening algorithm into the routine annual care of patients with T2DM in primary care clinics. We also believe that the inclusion of patient navigators in the complex management of patients with T2DM in primary care clinics and diabetic centers, as part of a multidisciplinary team, would greatly increase the utility of the screening algorithm.

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Conflict of interest
The authors declare no conflicts of interest that pertain to this work.

Please refer to the accompanying ICMJE disclosure forms for further details.

Authors' contributions
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Supplementary data
Supplementary data to this article can be found online at https://doi.org/10.1016/j.jhepr.2021.100382.

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