literature. Additionally, it outlines a clear connection to clinical care pathways which emphasize the importance of cardiometabolic risk factors in disease incidence and progression. This new nomenclature thereby serves as a catalyst to propel the field forward, fostering the development of improved biomarkers, new treatments and ultimately better care for patients.

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Authors' contributions

All authors contributed equally.

Declaration of Competing Interest

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References

[1] Rinella ME, Lazarus JV, Ratziu V, et al. A multi-society Delphi consensus statement on new fatty liver disease nomenclature. J Hepatol 2023 article in press. https://doi.org/10.1016/j.jhep.2023.06.003.

[2] Cusi K, Younossi Z, Roden M. From NAFLD to MASLD: promise and pitfalls of a new definition. J Hepatol 2023 article in press.

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Correspondence: "A multisociety Delphi consensus statement on new fatty liver disease nomenclature"

Dear Editor,

Steatotic liver disease (SLD) has been proposed by Rinella *et al.* as the new overarching term to encompass various aetiologies of steatosis, including metabolic dysfunction-associated steatotic liver disease (MASLD), MASLD and increased alcohol intake (MetALD), alcohol-associated liver disease (ALD), specific aetiology SLD, and cryptogenic SLD [1]. However, unlike metabolic dysfunction-associated fatty liver disease (MAFLD) suggested by Eslam *et al.* in 2020, blood biomarkers and scores were not explicitly outlined as one of the methods for identifying hepatic steatosis [2]. These biomarkers or scores, such as the fatty liver index, are deemed appropriate for extensive epidemiological studies to detect hepatic steatosis in adults [2]. Indeed, the European clinical practice guidelines state that validated biomarkers and scores are acceptable substitutes for diagnosing fatty liver when imaging methods are unavailable or impractical, such as in big epidemiological surveys [3].

With increasing clinical and public health burdens from SLD, a population-based study is currently being conducted to determine its prevalence in Malaysia [4]. Biomarkers and scores are very useful here because imaging is neither financially nor logistically feasible in the nationwide survey [4]. Thus, biomarkers and scores can be important for low- and middle-income countries like Malaysia, where the availability and cost of imaging affect feasibility [3]. Besides that, their use in primary care can increase awareness and early diagnosis of SLD, which is essential for secondary disease prevention. Furthermore, the fibrosis-4 (FIB-4) score can be used to screen for more severe SLD.[5] Those with less severe SLD can be managed in the primary care setting. In contrast, referrals for further evaluations are necessary for individuals with high or intermediate scores [5].

With a better understanding of the pathophysiology and epidemiology of SLD, it is clear that multi-disciplinary collaborative efforts are vital to managing the complex disease [1,2,5]. Public health-wise, determining the national prevalence of SLD is essential to gauge the issue's magnitude [4] accurately. The information can raise SLD priority in health agenda setting at the national level, catalyze evidence-based policymaking to prevent and manage SLD, and incorporate SLD into the broader noncommunicable disease prevention and control initiatives due to shared common risk factors [4,5]. Public health practitioners play a crucial role in raising awareness and knowledge of various stakeholders on SLD, with healthcare professionals in primary care and the general population being the key target groups [5]. In this sense, accepting and including readily available biomarkers and scores for identifying hepatic steatosis is essential and should be considered in future updates of the nomenclature or guidelines on the disease.

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Declaration of interests

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References

[1] Rinella ME, Lazarus JV, Ratziu V, Francque SM, Sanyal AJ, Kanwal F, et al. A multisociety Delphi consensus statement on new fatty liver disease nomenclature. Ann Hepatol 2024;29. https://doi.org/10.1016/j.aohep.2023.101133.
[2] Eslam M, Newsome PN, Sarin SK, Anstee QM, Targher G, Romero-Gomez M, et al. A new definition for metabolic dysfunction-associated fatty liver disease: An international expert consensus statement. J Hepatol 2020;73(1):202–9. https://doi.org/10.1016/j.jhep.2020.03.039.
[3] European association for the study of the liver, european association for the study of diabetes. EASL-EASD-EASO clinical practice guidelines for the management of non-alcoholic fatty liver disease. Obes Facts 2016;9(2):65–90. https://doi.org/10.1159/000443344.
[4] Wan KS, Mat Rifin H, Mohd Yusoff MF, Yoga Ratnam KK, Chan WK, et al. Prevalence of metabolic syndrome and metabolic dysfunction-associated fatty liver disease in Malaysia 2023: study protocol for a community-based nationwide cross-sectional survey. BMJ Open 2023;13(10):e074432. https://doi.org/10.1136/bmjopen-2023-074432.
[5] Chan WK, Tan SS, Chan SP, Lee YY, Tee HP, Mahadeva S, et al. Malaysian Society of Gastroenterology and Hepatology consensus statement on metabolic dysfunction-associated fatty liver disease. J Gastroenterol Hepatol 2022. https://doi.org/10.1111/jgh.15787.

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Protean strictures: Shifting severity beneath the diagnostic façade

Dear Editor,

The recent review on the management of post-liver transplant biliary anastomosis by Bofill *et al.* in the journal provides a valuable overview of the topic [1]. However, an important clinical observation regarding the potential for an atypical presentation of post-anastomotic biliary strictures warrants further discussion.

While the authors note that asymptomatic elevations in liver enzymes, especially in a cholestatic pattern, may indicate a biliary stricture, clinicians should be aware of a more subtle phenotype. This phenotype can present with minimal or absent elevations in ALT, AST, alkaline phosphatase, and bilirubin. Additionally, imaging modalities like MRCP may fail to reveal significant biliary dilation due to artifacts from surgical materials.

In these cases, ERCP with active contrast injection has been observed to demonstrate near-complete anastomotic atresia (Fig. 1a), subsequently confirmed by cholangioscopy (Fig. 1b). Successful recanalization of the atretic area shows profound recipient bile duct dilation (Fig. 1c). This phenomenon has also been noted in post-surgical biliary strictures of other etiologies.

Several factors may contribute to this atypical presentation:

- **Donor liver resilience:** Donor liver hepato- and cholangiocytes may possess greater tolerance to early biliary obstruction, potentially masking standard diagnostic markers.
- **"Tipping point":** A critical threshold may exist where rapid hepatic injury occurs secondary to obstruction and associated inflammation.
- **Biliary system compliance:** Differences in compliance between the donor and recipient biliary systems, including bile duct size mismatch, could obscure typical imaging findings.

Given this insidious presentation, a low threshold for considering MRCP and/or ERCP in post-transplant patients is advisable, even in the absence of pronounced biochemical or imaging abnormalities. Early detection and intervention could potentially improve long-term graft function and patient outcomes.

This distinct phenotype underscores the complexity of post-liver transplant care and highlights the potential for delayed diagnosis and the need for a proactive management approach. Often, patients with this presentation may initially undergo investigations to rule out vascular compromise or graft rejection. However, minimally elevated liver enzymes remain unexplained, even without pronounced biochemical or imaging abnormalities. In that case, a low threshold for ERCP is warranted as stricture severity may be disproportionate to the degree of biochemical abnormality.