JHEP|Reports

Reply to: "Rethinking risk indices in pediatric MASLD"

To the Editor:

We appreciate the thoughtful comments and constructive feedback from Dr. Li and Dr. Mao regarding our recent publication in *JHEP Reports*.[1] Their insights highlight important clinical and methodological considerations for diagnosing and managing metabolic dysfunction-associated steatotic liver disease (MASLD) in children and adolescents.

We agree that the lack of individual-level data on alcohol consumption in NHANES is a limitation. Although alcohol use among adolescents can lead to misclassification of early alcohol-related liver disease (ALD) as MASLD, sustained clinically significant intake is relatively uncommon in this age group compared to adults, so the overall risk of substantial misclassification is likely limited.[2,3] Nonetheless, future studies should incorporate validated measures of alcohol use to improve diagnostic accuracy and risk stratification.

We also appreciate the reminder about rare monogenic disorders, such as lysosomal acid lipase deficiency and familial partial lipodystrophy, which can mimic MASLD.[4] In our study, we excluded participants with known secondary causes based on available clinical and laboratory data. However, some rare genetic syndromes may go undetected in large population-based datasets. Clinicians should maintain a high index of suspicion, particularly when children present with atypical or severe metabolic phenotypes, and targeted genetic testing should be considered in selected cases to ensure accurate diagnosis and management.

Regarding surrogate markers, we acknowledge that although SPISE and METS-IR demonstrated good predictive value, their sensitivity in the Korean pediatric cohort was about 79%. This means that approximately one in five children with MASLD could be missed if these indices are used in isolation. This finding underscores the importance of applying these markers as part of a broader, integrated risk assessment rather than relying on them alone.

As noted, MRI-PDFF remains the gold standard for non-invasive quantification of hepatic steatosis, offering excellent sensitivity and specificity.[5] However, MRI-PDFF is not universally available and poses higher costs and logistical barriers compared to biochemical or anthropometric indices. Our study aimed to evaluate practical, accessible tools suitable for early risk identification, especially in resource-limited environments. When feasible, confirmation by MRI-PDFF or biopsy is preferable, particularly when precise quantification is needed to guide management.[6]

We appreciate the opportunity to clarify these points. Our study contributes to the growing evidence supporting the use of simple, non-invasive markers to screen for MASLD risk in children and adolescents. We recognize the inherent limitations of large-scale, retrospective datasets and agree that further prospective validation – including assessment of alcohol use and rare genetic conditions – will be essential to improve the clinical utility of these indices.

Finally, we would like to thank Dr. Li and Dr. Mao again for their valuable input and their commitment to improving care for children at risk for MASLD.

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Conflict of interest

The authors of this study declare that they do not have any conflict of interest.

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

Authors' contributions

Kyungchul Song: Writing – original draft. Yu-Jin Kwon– review & editing.

Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jhepr.2025.101533.

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