Nonalcoholic Fatty Liver Disease and Cardiovascular Risk: Is There a Place for Obstructive Sleep Apnea?

To the Editor:

We read the recently published review article by Alp et al. with interest. The authors included 93 obese children with nonalcoholic fatty liver disease (NAFLD), 307 obese children without NAFLD, and 150 healthy age- and sex-matched control subjects. After performing bivariate logistic regression analysis, they found that NAFLD was independently associated with the interventricular systolic thickness. The lack of association with other markers of vascular dysfunction in this study might be explained by a lead time bias, or insufficient time for a disease to be fully manifested.

Nevertheless, we believe that several aspects merit a brief discussion. First, as was mentioned by the authors, they used conventional abdominal ultrasonography, which is known to have limited sensitivity and cannot stratify the degree of liver inflammation. The importance of liver inflammation is highlighted by the fact that patients with nonalcoholic steatohepatitis (a type of NAFLD with significant liver inflammation) have a greater vascular risk compared with noninflammatory NAFLD.

Second, it is evident that obese children have a higher prevalence of obstructive sleep apnea (OSA), which might indeed be independently associated with both NAFLD and vascular disease. Early diagnosis and treatment of OSA in the pediatric population might beneficially influence the future cardiovascular risk and halt the progression of existing cardiometabolic derangements, which is so commonly seen later in life. Clinical studies in the pediatric population are needed to assess the effect of OSA and its treatment on the occurrence of NAFLD.

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Disclosures

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References


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