



Albuminuria Is Associated with Steatosis Burden in Patients with Type 2 Diabetes Mellitus and Nonalcoholic Fatty Liver Disease (*Diabetes Metab J* 2021;45:698-707)

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The prevalence of type 2 diabetes mellitus (T2DM) is increasing globally, and nonalcoholic fatty liver disease (NAFLD) is one of the most common liver disorders worldwide. NAFLD has been suggested to be highly associated with insulin resistance. Recent studies have shown a strong association between NAFLD and T2DM [1]. The 2021 Clinical Practice Guidelines for Diabetes Mellitus in Korea added a new section on “Diagnosis, evaluation, and treatment of non-alcoholic fatty liver disease (NAFLD).” The Korean Diabetes Association guidelines recommended that all adults with T2DM undergo NAFLD evaluation [2].

AS T2DM is a chronic, progressive disease, diabetologists tend to care for diabetic patients for a long time. They have to pay attention to diabetic micro- and macro-complications and various comorbidities in addition to glycemic control. Therefore, some risk factors and sentinel markers are important for early detection, monitoring, and managing accompanying diseases.

Albuminuria is an important marker of cardiovascular risk along with renal disease. This study entitled “Albuminuria is associated with steatosis burden in patients with type 2 diabetes mellitus and nonalcoholic fatty liver disease” showed that T2DM patients with significant hepatic steatosis had a higher prevalence of albuminuria, which was independently associated with significant hepatic steatosis [3]. This study demonstrated a new role of albuminuria as representing hepatic steatosis.

We have several questions for the authors.

The Discussion begins with “This prospective and cross-sectional study~” But, I wonder if the design of this study is prospective. I think it is cross-sectional study.

One of the exclusion criteria in this study was estimated glomerular filtration rate (eGFR) <45 mL/min/1.73 m². Chronic kidney disease is usually defined as GFR less than 60 mL/min/1.73 m². I cannot find any reason why they used eGFR less than 45 mL/min/1.73 m².

A Chinese cross-sectional study of 1,763 patients with T2DM and NAFLD [4], which was compared to your study, divided study population as liver steatosis and liver fibrosis. Groups with both liver steatosis but no advanced liver fibrosis and with advanced liver fibrosis showed similar controlled attenuation parameter level (308.3 and 300.9 dB/m), but their liver stiffness measurement (LSM) was significantly different. I want to know if you divided patients with significant steatosis by LSM level for analysis.

The question whether NAFLD is the cause or consequence of diabetes or if they are mere co-occurrences remains unanswered. Therefore, to use albuminuria as an attractive marker for NAFLD progression in diabetes, long-term and well-designed randomized controlled trials are needed.

CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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