To the Editor:

Kiyosue et al reported that the average number of stenotic coronary arteries was larger in the chronic kidney disease (CKD) group, after stratifying patients into 3 groups by estimated glomerular filtration rate (eGFR): normal group (eGFR >75 ml·min⁻¹·1.73m⁻²), mild reduction group (75≥eGFR ≥60ml·min⁻¹·1.73m⁻²), and CKD group (eGFR <60 ml·min⁻¹·1.73m⁻²). However, they did not adjust for multiple confounding factors related to eGFR and coronary heart disease, such as age, BMI, blood pressure, fasting plasma glucose, triglycerides, HDL- and LDL-cholesterol. They showed these factors rather ambiguously in Table1. They did not present numerical data for fasting plasma glucose, triglycerides or HDL- and LDL-cholesterol levels. The associations between serum levels of triglycerides and CKD and between serum levels of HDL-cholesterol and CKD are well known. Schaeffner et al reported that elevated total cholesterol, high non-HDL-cholesterol, a high ratio of total cholesterol/HDL-cholesterol, and low HDL-cholesterol in particular, were significantly associated with an increased risk of developing renal dysfunction in men with an initial creatinine <1.5 mg/dl in a prospective cohort study of 4,483 initially healthy men participating in the Physicians’ Health Study. In a Japanese population study, Tozawa et al reported that high triglyceride levels predicted a risk of developing proteinuria in both men and women, but not total cholesterol or LDL-cholesterol, and that high triglyceride levels in women and low HDL-cholesterol levels in men predicted a decline in renal function. Recently, my group reported a cross-sectional association between serum levels of LDL-cholesterol and eGFR in Japanese men and women. We compared mean serum levels of LDL-cholesterol among subjects with eGFR corresponding to CKD stages 1, 2, and 3. In our data, the serum mean LDL-cholesterol level of subjects with CKD stage 1, 2 or 3 was 119.1 mg/dl, 122.9 mg/dl, and 130.9 mg/dl (P<0.05 compared with stage 1), respectively, in men and 112.2 mg/dl, 122.2 mg/dl (P<0.0001 compared with stage 1), and 127.8 mg/dl (P<0.01 compared with stage 1), respectively, in women. I would deeply appreciate it if the authors reanalyzes whether eGFR was independently associated with coronary artery stenosis after adjusting for these confounding coronary risk factors.

References


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