C-Reactive Protein Cutoff-Point of 0.65 mg/L may be Appropriate not Only as a Component of Metabolic Syndrome but Also as a Risk Predictor of Cardiovascular Disease

To the Editor:

Matsushita et al studied the association between C-reactive protein (CRP) and the Framingham Risk Score (FRS) in middle-aged Japanese men without a medical history of cardiovascular disease (CVD). They reported that the geometric mean of CRP in below average, average, moderately above average, and high CVD risk categories was 0.39 mg/L, 0.58 mg/L, 0.70 mg/L, and 0.79 mg/L, respectively! Therefore, the CRP cutoff-point of 0.65 mg/L, which we reported as a cutoff-point for metabolic syndrome (MS), may be an appropriate indicator for increased CVD risk. Our study population was rather small. However, Nakanishi et al reported that adjusted geometric mean concentrations of CRP in 988 women with 0, 1, 2, 3, and 4 or more components of MS were 0.28, 0.31, 0.49, 0.75, and 0.90 mg/L, respectively (p<0.001). Saijo et al reported that adjusted geometric mean concentrations of CRP in 3,412 men with 0, 1, 2, and 3 or more components of MS were 0.36, 0.49, 0.57, and 0.77 mg/L, respectively (p<0.001). Therefore, the CRP cutoff-point of 0.65 mg/L may be suitable as an indicator of MS among Japanese. Further, Ye et al reported that the CRP median for those with 0, 1, 2, 3, and 4 or more components of MS were 0.38, 0.44, 0.58, 0.93, 1.10, and 1.72 mg/L respectively (p<0.0001) among 1,458 Chinese men and 1,831 Chinese women. Therefore, the CRP cut point of 0.65 mg/L may be appropriate as a component of MS not only for Japanese men and women but also for Chinese men and women. Moreover, in 27,939 apparently healthy women in the United States, Ridker et al reported that the relative risk for CVD was significantly higher in the group with CRP levels of 0.64–1.0 mg/L than the group with CRP levels of <0.36 mg/L. Recently, Sabatine et al reported that CRP levels of 1–3 mg/L are significant predictors of adverse cardiovascular events in patients with stable coronary artery disease even after adjustment for elements of FRS and clinical and laboratory parameters! Therefore, classification of CRP >3 mg/L as high CVD risk by the American Heart Association and the Centers for Disease Control and Prevention, which was derived from data including patients with acute or unstable coronary disease, should be re-estimated for general populations and stable patients without acute conditions, and the CRP cutoff-point of around 0.65 mg/L might be relevant even among Westerners.

References


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