Letter

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Prevalence of Dyslipidemia among Korean Adults: Korea National Health and Nutrition Survey 1998-2005 (*Diabetes Metab J* 2012;36:43-55)

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The prevalence of metabolic syndrome is increasing worldwide [1,2] and is becoming a social and economic problem. Recently, the increasing prevalence of metabolic syndrome in Korea has also been reported based on the Korean National Health and Nutritional Survey (KNHANES) [3]. The age-adjusted prevalence of metabolic syndrome in adults aged ≥20 years in Korea increased significantly from 24.9% in 1998 to 31.3% in 2007, and, of five individual metabolic syndrome components, the incidence of low high density lipoprotein cholesterol (HDL-C) criteria increased the most over 10 years (13.8% of increasing) [3]. Hypertriglyceridemia also showed a significant 4.9% increase during that period [3].

Metabolic syndrome is an important risk factor for atherosclerosis [4]. It is a disease characterized by insulin resistance [5], and dyslipidemia is one of its important components [6]. However low density lipoprotein cholesterol (LDL-C) level is not included in the criteria of metabolic syndrome. Elevated LDL-C level is a major cause of coronary heart disease and other atherosclerotic disease and can provide additional information for the future risk of atherosclerosis aside from metabolic syndrome [7].

Lee et al. [8] defined dyslipidemia according to LDL-C level as well as triglyceride and HDL-C level and investigated the change of prevalence of dyslipidemia among Korean adults during 1998-2005 with KNHANES data. Considering the im-

portance of LDL-C for the risk of atherosclerosis, this study is very important in the view of public health in Korea. Dyslipidemia in this study is defined as total cholesterol ≥240 mg/dL, LDL-C ≥160 mg/dL, HDL-C <40 mg/dL, and triglyceride ≥200 mg/dL. However, it is known that women have higher levels of HDL-C than men [9-11], and the definition of low HDL cholesterolemia in the criteria of metabolic syndrome is different in men and women according to National Cholesterol Education Program Adult Treatment Panel III (NCEP ATP III) [6], with an HDL-C level <50 mg/dL required for women. A relatively lower prevalence of dyslipidemia in the women in this study [8] compared to that of a previous report [3] despite adding a criterion for LDL-C to the requirements of dyslipidemia might be due to a lower cutoff level of low HDL cholesterolemia in women. Based on the appropriate cutoff level of low HDL cholesterolemia for the prediction of a clinically important end-point such as coronary heart disease in the Korean population, the sex difference in HDL-C level should be considered.

Cardiovascular and cerebrovascular disease is the second most prevalent cause of death in Korea following malignancy [12], and the incidence of mortality from cardiovascular disease has persistently increased during recent years [12]. Considering that dyslipidemia is a major cause of such diseases, the study of Lee et al. [8] is important to understand the increas-

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ing tendency of dyslipidemia and the very low control rate of dyslipidemia in the Korean population and to support the need for an urgent health and medical policy plan to control dyslipidemia.

CONFLICTS OF INTEREST

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

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