What Type of Statin and What Level of Low-Density Lipoprotein Cholesterol Should Be Appropriate for Secondary Prevention for Japanese Patients With Coronary Artery Disease?

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It is consensus that Caucasian patients with coronary artery disease (CAD) should be preferentially treated with a potent statin to lower their low-density lipoprotein cholesterol (LDL-C) level to less than 70 mg/dl based on solid evidence from many randomized clinical trials (RCTs). However, for Asian patients, including Japanese, there is still a lack of concrete evidence for the type of statin and level of LDL-C that should comprise the treatment goals for CAD patients. In fact, although the Japan Atherosclerosis Society launched a new guideline for the diagnosis and prevention of atherosclerotic cardiovascular disease (CVD) in Japanese in April 2012, the recommended LDL-C level for secondary prevention in CAD patients was set lower than 100 mg/dl. One of the main reasons for this decision is that there are not yet results of RCTs for secondary prevention in Japanese CAD patients. In this editorial, the current status of evidence for secondary prevention in Japanese patients, inherent problems and future perspective are noted.

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vasstatin, there was less MACE than in the mild statin group, approximately 70% of which was treated with pravastatin.4

Pravastatin is only a hydrophilic stain and it is reviewed that it ameliorates insulin sensitivity, HbA1c and increases adiponectin, resulting in favor of preventing the progression of atherosclerosis compared with other lipophilic stains and the semi-hydrophilic rosuvastatin.10 Of note, a recent prospective head-to-head clinical trial in which the effects of aggressive LDL-C lowering with rosuvastatin and mild LDL-C lowering with pravastatin were compared in terms of regression/progression of the intima-media thickness (IMT) of the carotid artery revealed that the former progressed and the latter regressed IMT in 1 year, while the former significantly worsened HbA1c compared with the latter.11 Thus, although pravastatin is better than strong stains with regard to metabolic parameters, the greater LDL lowering by strong stains may override this effect.12 This issue will be answered by an ongoing prospective study “the ALPS-AMI” where the outcome for pravastatin and atorvastatin is being compared in a head-to-head manner after CAD patients’ LDL-C was lowered to less than 100 mg/dl by both treatments.13

In the present study by Natsuaki et al, the high-density lipoprotein cholesterol (HDLC) level of patients with LDL-C of 80–100 mg/dl was slightly higher than in the other groups. This may have lowered the incidence of MACE in this group, resulting in a negation of the difference between that of patients with LDL-C of 100–120 mg/dl. Because HDLC has been reported to have a great effect on the occurrence of CV events,14 and because HDLC was not included as a potential independent variable selected for multivariate analysis, further analyses that include HDLC are mandatory.

Disclosures
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