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Guideline for Prevention of Atherosclerotic Cardiovascular Disease in Japan - 2012 Version

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To provide an updated practical guideline for the treatment of dyslipidemia, the Japan Atherosclerosis Society (JAS) has been revised the guideline over three times. During this period, many cohort studies and clinical trials were conducted and published in Japan, including Hisayama study, Japan Lipid Intervention Trial (J-LIT), NIPPON DATA80, MEGA study, and JELIS. Based on these clinical evidences, latest JAS Guideline for Prevention of Atherosclerotic Cardiovascular Disease was released in July 2012.

The JAS Guideline 2012 stratifies the risk of ASCVD for primary prevention according to the absolute risk calculated based on the results of the NIPPON DATA80. This study identified age, sex, DM, current smoking, systolic blood pressure and the TC levels as risk factors and determined the absolute risk of death from ASCVD depending on the degree or existence of these factors. JAS Guideline categorizes the patients with 10-year risk of death from ASCVD of 2% as the high-risk group (category III). In addition, DM, CKD and a history of non-cardiogenic cerebral infarction or peripheral artery disease are considered to be important risk factors, so that the patients with any of these conditions are classified as the high-risk group.

In JAS Guideline, the management targets for dyslipidemia depend on the patients with different risk levels (category levels). For primary prevention, drug therapy should be considered after lifestyle modification for a certain period or evaluating atherosclerotic risk other than lipid profile such as carotid artery ultrasonography. The management target for LDL-C level in each category is less than 160 mg/dL (category I; low absolute risk group), 140 mg/dL (category II; moderate absolute risk group), 120 mg/dL (category III; high absolute risk group), respectively. For secondary prevention, lipid lowering therapy targeting a 100 mg/dL of LDL-C is recommended concomitantly with life style modification. There have been some opinions that lower target level should be applied for very high-risk patients such as DM, CKD and especially secondary prevention patients. Although there is insufficient evidence to support to set such goals in Japanese population, the current guideline suggested that lower target level can be considered according to the individual risk such as very high-risk conditions for ASCVD. If drug therapy is necessary, statins are the first drug of choice for patients with hyper-LDL cholesterolemia although the dosage of statin is quite different from that in Western countries. In addition, other drug including resin, probucol and/or ezetimibe are also suggested in combination with statins to achieve target LDL-C level or selected for statin intolerant patients. In addition, the combination of statins with EPA is recommended for high-risk patients. Finally, JAS guideline emphasizes the importance of multiple risk factor management for the prevention of ASCVD. To prevent ASCVD, it is important not only to manage dyslipidemia but also to modify the other risk factors such as cigarette smoking, hypertension, diabetes mellitus (DM) and CKD. There has been plenty of evidence to support the importance of comprehensive risk management.