Executive Summary

Dyslipidemia is an important risk factor, along with smoking, hypertension, diabetes, and obesity, for cardiovascular and cerebrovascular diseases and the burden it causes has recently increased. At present, guidelines and treatment standards for dyslipidemia, and the HIRA guideline for insurance payment standard have differences, and are not also reflective of the disease aspects of Koreans. Thus, this study suggests the directions for the development of Korean dyslipidemia guideline.

This study performed comparative analysis of 8 guidelines selected through quality assessment of guidelines published in other countries since 2004, and drew key questions that should be included in future guidelines. Such key questions took more concrete shapes while considering the epidemiological characteristics of Koreans and the current status of prescriptions for lipid-lowering agents, and suggested directions for the development of Korean dyslipidemia guideline through the agreement meetings with related scientific societies and professionals for guidelines.

Eight selected guidelines of Scotland, UK, Canada, Europe, Singapore, USA, Japan, and Korea were segmented into 5 areas of diagnosis standard, risk assessment, treatment goal and value, treatment initiation standard, and drug therapy follow-up test. These guidelines were then compared. Based on these works, 5 key questions and 9 detailed questions were drawn.

1. Diagnostic criteria
2. Risk assessment
2-1. Variables of risk assessment tool
2-2. Variables should have been included in risk assessment tool

Recently, 'the lower, the better' concept tends to be increased in western societies in which the LDL-cholesterol level should be lowered below the goal value, but the aspect of the disease in Korea is different from those of other western countries. The epidemiology of cardiovascular and cerebrovascular diseases in Korea has shown recently that hemorrhagic stroke has decreased and ischemic heart disease and ischemic stroke has increased, but cerebrovascular diseases are still major causes of death and disability compared to the western countries.

In addition, the prevalence of dyslipidemia tends to increase by 10.9% in hypercholesterolemia and by 17.3% in hypertriglycerodemia, showing that hypercholesterolemia is lower and hypertriglycerodemia is higher than those of the western values (USA 2006 NHANES 16% and 13%, respectively). Asians are known to have similar lipid-improving effect with lower statin level than Caucasians, and it is thus necessary to establish the standard by considering it.

The prescription for lipid-lowering agents has recently increased, but is not enough for secondary prevention, and although the prescription rate

for secondary prevention is higher in related clinical department, still the treatment goal has not sufficiently accomplished in the long-term, and statins have been shown as the initial treatment in most cases.

The areas that need support for developing the basis to reflect the Korean epidemiological characteristics, which are different from those of foreign countries, are diagnosis standard, risk assessment result variables, 1st·2nd treatment goal values, drug therapy initiation standard and period by risk groups. To accomplish these in the long-term basis, a large-scale patients cohort should be established to ensure representing data, and the basis that directly related to the national health should be generated by combining public health data sources of public organizations.

That is, in the system in which individual information is completely deleted right after data convergence, if the current status of using medical services and the presence of accompanying diseases of dyslipidemic patients in the KNHANES are connected to the HIRA data, and if the death of a patient is connected to the mortality data of the National Statistical Office, then the excellent basis with competitiveness in the public health can be efficiently generated.

Dyslipidemia has certain epidemiological characteristics that foreign study results cannot be directly applied, and if such aspects are not considered, it is difficult to overcome the difference between actual treatment and the guidelines. Therefore, active investment is needed to perform good quality clinical studies for Koreans, and basis-oriented dyslipidemia guidelines should be developed by considering key questions suggested in this study and epidemiological characteristics based on domestic data.