투석전문의 연수강좌

만성신장질환 환자에서 이상지질혈증의 평가와 치료

전북대학교 의학전문대학원 신장내과

이 식

Is Lipid Management Effective for All Stages of CKD? – Assessment and Management of Dyslipidemia in CKD Patients

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The definition of dyslipidemia is any abnormality in plasma lipoprotein concentration or composition that is associated with an increased risk for atherosclerotic cardiovascular disease. Renal dysfunction in CKD has been established as a risk factor for cardiovascular events that is independent of conventional cardiovascular risk factors. It is well known that patients with impaired renal function exhibit significant alteration in lipoprotein metabolism that results in the development of dyslipidemia. The pattern of dyslipidemia in patients with CKD differs from that of the general population. An increased serum triglyceride (TG) level is one of the most common quantitative lipid abnormalities in CKD patients due to reduced enzymatic processing of TG. The serum concentrations of TG-rich lipoproteins such as VLDL increase in the early stages of CKD. The plasma total cholesterol level of CKD patients is usually normal or reduced. During the CKD phase prior to dialysis, patients typically have elevated LDL, but once patients are on dialysis, LDL levels frequently fall due to decreased conversion of IDL to LDL. The proportion of small dense LDL particles is increased in CKD. CKD patients have generally lower plasma HDL-C levels than individuals with normal renal function. Several studies have shown that dyslipidemia causes primary kidney injury and contribute to the progression of established kidney disease, and statins have been found to potentially retard the progression of renal disease in patients with CKD. Currently, many large randomized trials in patients with normal or modestly reduced renal function have demonstrated the cardiovascular benefits of lipid lowering therapy, almost entirely with statin therapy. On the contrary, some trials on the effect of statin therapy in dialysis patients demonstrated that the initiation of statin therapy provided no cardiovascular benefits.

Here, we will review the evidence for lipid-lowering therapy, almostly statin, in patients at various stages of CKD, including patients with CKD on dialysis.