P18

관상동맥 석회화가 신기능에 미치는 영향

가천의과학대학교 내과학교실

장제현 · 성지윤 · 나선영 · 최성한 · 정을식 · 신동수 · 정지용 · 이현희 · 정우경 · 문찬일 · 김세중

Impact of Coronary Artery Calcification on Renal Function in Nondialyzed Patients

Jae Hyun Chang, Ji Yoon Sung, Sun Young Na, Shung Han Choi, Eul Sik Jung
Dong Su Shin, Ji Yong Jung, Hyun Hee Lee, Wookyung Chung, Chan Il Moon, Sejoong Kim

Department of Internal Medicine Gachon University of Medicine and Science

Coronary artery calcification (CAC) has been described in individuals with chronic kidney disease (CKD), and its presence is associated with an increased risk for cardiovascular death. We evaluated the association between renal function and CAC and determined whether CAC can predict the rate of change in renal function over time. We retrospectively reviewed 918 Korean outpatients who had undergone computed tomographic coronary angiography. The mean age of the participants was 57 years, and the mean estimated glomerular filtration rate (eGFR) was 82.5 mL/min/1.73m^2. The patients were divided into CAC score (CACS) >100 group (n=136) and the CACS ≤100 group (n=782), according to the CACS. After adjusting for the confounding variables, eGFR was independently associated with a CACS >100 (95% CI, 0.968−0.999; p=0.032). The mean follow−up duration for 237 patients who underwent follow−up renal function testing was 9.6 months, and 62 patients (26.2%) had worse renal function. After adjusting for the same confounding variables, CACS >100 was independently associated with worse renal function (95% CI 1.133−4.88; p=0.022). The results suggest that CACS may be inversely related to baseline renal function and may predict an aggravation in renal function.

Key Words: 만성콩팥병, 관상동맥 석회화, 신기능
Kidney disease, Coronary artery calcification, Renal function