

## 만성 혈액투석환자에서 CT촬영으로 검사한 복부대동맥 석회화의 임상적 의의

가톨릭대학교 의과대학 내과학교실

윤혜은 · 황현철 · 정성진 · 정현화 · 신석준

### The Clinical Significance of Abdominal Aortic Calcification Measured by Spiral CT Scan in Chronic Hemodialysis Patients

Hye Eun Yoon, Hyun Chul Whang, Sungjin Chung, Hyun Wha Chung, Seok Joon Shin

Department of Internal Medicine, The Catholic University of Korea

**Background:** This study evaluated the clinical significance of abdominal aortic calcification (AAC) measured by spiral CT scan in chronic hemodialysis patients in terms of mortality and echocardiographic variables.

**Methods:** Records of 72 patients who initially started maintenance hemodialysis therapy and took an abdominal CT scan were retrospectively analyzed. AAC was semiquantitatively measured using an aortic calcification index (ACI), and patients were subdivided according to the ACI tertiles. Patient characteristics, echocardiographic measurements, and Kaplan–Meier survival rates were compared between groups, and correlation between ACI and echocardiographic variables and predictors of all–cause mortality were analyzed.

**Results:** Patients in the higher ACI tertile were significantly older, more female, more diabetic, had more prevalent history of cardiovascular disease, and showed lower E/A ratio and higher mitral valve–deceleration time (MV–DT) values than those in the lower ACI tertile. There was a significant negative correlation between ACI and E/A ratio and a significant positive correlation between ACI and MV–DT. Patients in the higher ACI tertile showed a significantly lower survival rate compared with those in the lower ACI tertile. Hematocrit, ejection fraction and ACI were significant predictors of all–cause mortality.

**Conclusion:** AAC is associated with diastolic dysfunction and increased risk of mortality in chronic hemodialysis patients.

**Key Words:** 복부대동맥 석회화, 심초음파, 혈액투석

Abdominal aortic calcification, Echocardiography, Hemodialysis