

## 한국의 고혈압 환자에서 만성 신질환의 유병률과 진행

서울대학교 의과대학 내과학교실<sup>1</sup>, 분당서울대학교병원 내과<sup>2</sup>, 보라매병원 내과<sup>3</sup>

김세중<sup>1</sup> · 진호준<sup>2</sup> · 나기영<sup>2</sup> · 채동완<sup>3</sup> · 임춘수<sup>1</sup> · 김연수<sup>1</sup> · 안규리<sup>1</sup> · 한진석<sup>1</sup> · 김성권<sup>1</sup>

### The Prevalence and Progression of Chronic Kidney Disease in Korean Hypertensive Patients

Sejoong Kim<sup>1</sup>, Ho Jun Chin<sup>2</sup>, Ki Young Na<sup>2</sup>, Dong-Wan Chae<sup>3</sup>, Chun Soo Lim<sup>1</sup>  
Yon Su Kim<sup>1</sup>, Curie Ahn<sup>1</sup>, Jin Suk Han<sup>1</sup>, Suhnggwon Kim<sup>1</sup>

Department of Internal Medicine Seoul National University College of Medicine<sup>1</sup>, Department of Internal Medicine Seoul National University Bundang Hospital<sup>2</sup>, Department of Internal Medicine Boramae Hospital<sup>3</sup>

**Purpose** : Hypertension (HT) has been known to play an important role in initiation as well as in progression of chronic kidney disease (CKD). We evaluated the prevalence of CKD and loss of renal function and related risk factors during follow-up period in HT patients.

**Methods** : We retrospectively analyzed the medical records of 981 outpatients with HT in Bundang Seoul National University hospital and were followed over one year. We used the simplified Modification of Diet in Renal disease study equation to estimate glomerular filtration rate (eGFR). Decrease in kidney function (DKF) was defined as annual loss of eGFR more than 7% of basal eGFR during follow-up period.

**Results** : The follow-up duration was  $17.7 \pm 3.93$  months. Prevalence of CKD was 51% in participants. Eight percent of patients had CKD stage 1, 18.2% had stage 2, 18.9% had stage 3, 3.7% had stage 4, and 2.2% had stage 5. In 481 HT patients who had normal urinalysis and eGFR more than 60 mL/min, 220 patients (45.7%) had DKF. After adjustment for all covariates, there were no clinical predictors of DKF. In 500 HT patients with CKD, 200 patients (40.0%) had DKF. After adjustment for all covariates, history of DM (Odds ratio [OR], 2.71; 95% Confidence interval [CI], 1.17 to 4.32), hematuria or proteinuria (OR, 1.77; 95% CI, 1.29 to 2.44), and total cholesterol level (OR, 1.11 per 20 mg/dL increment; 95% CI, 1.01 to 1.21) were associated with increased odds of DKF.

**Conclusion** : The results suggested the prevalence of CKD in HT patients was high, and progressive loss of renal function was frequent in HT patients irrespective of the presence of baseline CKD. Established cardiovascular disease risk factors were strongly associated with DKF in HT patients with CKD, but not associated with DKF in HT patients without CKD.