



Nagoya City University Academic Repository

学位の種類	博士（医学）
報告番号	甲第1425号
学位記番号	第1030号
氏名	村井 俊介
授与年月日	平成 26 年 3 月 25 日
学位論文の題名	<p>The prevalence, characteristics, and clinical significance of abnormal albuminuria in patients with hypertension (高血圧患者におけるアルブミン尿の有病率とその意義)</p> <p>Scientific Reports 2014 January 24</p>
論文審査担当者	<p>主査： 早野 順一郎 副査： 三島 晃, 大手 信之</p>

Kidney function and cardiovascular disease are closely connected and albuminuria is a proven marker of cardiovascular risk. This study investigated the prevalence and characteristics of albuminuria in patients with hypertension. Outpatients with essential hypertension under medical treatment were enrolled in this study ($n = 350$, 70.0 ± 11.4 years old). Urine samples were collected for the measurement of albumin concentration, which are expressed as the ratio of urine albumin to creatinine concentration (mg/g Cr). Cross-sectional analyses were also performed of the relationships between urinary albumin and other variables. Urinary albumin was detected in 88.3% of patients, while only 35.4% showed abnormal albuminuria (≥ 30 mg/g Cr). The presence of abnormal albuminuria was independently correlated with systolic blood pressure, B-type natriuretic peptide, and C-reactive protein by multivariate analysis ($P < 0.05$). Multivariate regression analysis also identified systolic blood pressure, serum creatinine, B-type natriuretic peptide, and C-reactive protein as the only factors showing independent correlation with urinary albumin ($P < 0.05$). Thus, approximately 35% of hypertensive patients had abnormal albuminuria. Urinary albumin was closely associated with blood pressure, C-reactive protein, and B-type natriuretic peptide, indicating that the severity of albuminuria parallels that of systemic inflammation, cardiac load, and blood pressure.