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Persistent albuminuria as a surrogate marker of chronic kidney damage among newly diagnosed hypertensives: Prevalence and risk factors in an urban population in Karachi, Pakistan**Muslima Ejaza, Ejaz Ahmedb, Muhammed Mubarakc, Juanita Hatchera, and Tazeen Jaffard**

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Background: Hypertension is a major public health problem worldwide and a key factor for chronic kidney disease (CKD). Detection and treatment of CKD is of paramount importance. Albuminuria is one of the earliest screening markers recommended in patients at increased risk for CKD.

Objective: We conducted this study to determine the prevalence of persistent albuminuria (PA) in newly diagnosed hypertensive subjects and to study its associated risk factors.

Methods: A total of 173 (72%) of 240 subjects among 1340 newly diagnosed hypertensive subjects from an ongoing community-based cohort study who had been screened once for the presence of albuminuria were retested for the presence of PA in this study. Urinary albumin concentration (UAC) in mg/L and albumin-to-creatinine ratio (ACR) in mg/g creatinine were determined in a spot morning urine sample by Nephelometry.

Results: The prevalence of PA signifying CKD was 9.3% with 95% confidence interval (CI) of 7.8–10.8% by UAC and 8.1% by ACR method (95% CI: 6.6–8.4%). Subjects with persistent albuminuria had mean age of 56.4 ± 11.4 years and 50% were males. Factors independently associated were male gender (odds ratio [OR], 1.92 (95% CI: 1.24–2.97)) and age less than 55 years with positive family history of kidney disease (OR, 15.51; 95% CI: 7.35–32.97). Among measurable variables, high cholesterol levels ($p = 0.001$), and progressively higher levels of systolic blood pressure ($p < 0.001$) were associated with risk of PA.

Conclusion: Hypertensive kidney damage is already present in a significant number of newly diagnosed hypertensives suggesting late detection of hypertension.

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