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Objectives Previous studies have shown that depressive symptoms are associated with poor cardiovascular outcomes in patients with chronic kidney disease (CKD). However, the association between depressive symptoms and 24-h blood pressure (BP) patterns in this population is unclear. In the current study, we aimed determine the association between the non-dipping status and depression in patients with CKD in a cross-sectional study.

Methods A total of 221 patients with CKD were recruited into this study. Sleep quality was measured by Pittsburgh Sleep Quality Index (PSQI), while depressive symptoms were assessed by Beck Depression Inventory-13 item (BDI-13). 24-h BP patterns were determined by 24-h ambulatory BP monitoring. eGFR were assessed by simplified MDRD equation.

Results A total of 93 (42.9%) and 128 (57.1%) patients were defined as dippers and non-dippers, respectively. Non-dippers had higher daytime mean systolic BP and diastolic BP (135.3±18.8 vs 128.1±16.7, p=0.002; 80.9±11.3 vs 77.9±10.7, p=0.046), higher nocturnal systolic BP and nocturnal diastolic BPs (135.3±20.1 vs 117.1±15.7, p=0.000; 80.9±12.3 vs 71.2±10.7, p=0.000), In univariate analyses, non-dippers had higher BDI scores (6.27±5.42 vs 4.41±4.10, p=0.007) and higher PSQI scores (9.89±4.87 vs 8.60 ±4.40, p=0.037), older age (41.76±15.38 years vs 35.71 ±13.12 years, p=0.001) than dippers. In addition, non-dippers had had lower eGFR level than dippers (55.7±47.8 vs 77.8±47.1, p=0.001). Multiple logistic regression analyses showed non-dipping status was associated with high BDI scores (OR=1.07, 95% CI 1.03 to 1.12), eGFR (OR=0.98, 95% CI 0.96 to 0.99) and ambulatory systolic blood mean pressure (OR=1.12, 95% CI 1.03 to 1.42). In this model, there were no significant associations between non-dipping and age, sex, ambulatory diastolic blood mean pressure, PSQI score.

Conclusions Our study showed a high prevalence of non-dipping blood pressure in CKD patients. In view of the adverse effects of non-dipping on outcomes of patients with CKD, improvement of depressive symptoms might benefit this population.

Kidney disease

GW23-e1000 **DEPRESSION IS ASSOCIATED WITH NON-DIPPING BLOOD PRESSURE IN PATIENTS WITH CHRONIC KIDNEY DISEASE**

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