Use of secondary prevention medications among adults with reduced kidney function.

Use of secondary prevention medications among adults with reduced kidney function. published by admin on Mon, 08/19/2013 - 12:59pm

Title Use of secondary prevention medications among adults with reduced kidney function.

Publication Type Journal Article
Year of Publication 2012
Authors Chang, TI, Gao, L, Brown, TM, Safford, MM, Judd, SE, McClellan, WM, Limdi, NA, Muntner, P, Winkelmayer, WC

Journal Clin J Am Soc Nephrol
Volume 7
Issue 4
Pagination 604-11
Date Published 2012 Apr
ISSN 1555-905X
Keywords African Americans, Aged, Aged, 80 and over, Cardiovascular Agents, Cardiovascular Diseases, Cross-Sectional Studies, European Continental Ancestry Group, Female, Glomerular Filtration Rate, Humans, Kidney, Kidney Diseases, Male, Medication Adherence, Middle Aged, Multivariate Analysis, Regression Analysis, Secondary Prevention, Time Factors, Treatment Outcome, United States

Abstract BACKGROUND AND OBJECTIVES: Persons with kidney disease often have cardiovascular disease, but they are less likely to use recommended medications for secondary prevention. The hypothesis was that participants with reduced estimated GFR have lower use of medications recommended for secondary prevention of cardiovascular events (antiplatelet agents, angiotensin-converting enzyme inhibitors or angiotensin II receptor blockers, β-blockers, and statins) and lower medication adherence than participants with preserved estimated GFR.

DESIGN, SETTING, PARTICIPANTS, & MEASUREMENTS: In this cross-sectional analysis, we analyzed data from 6913 participants in the Reasons for Geographic and Racial Differences in Stroke study with a history of cardiovascular disease. Medication use was ascertained by an in-home pill bottle review. Medication adherence was assessed using a validated four-item scale.

RESULTS: Among participants with a history of cardiovascular disease, 59.8% used antiplatelet agents, 49.9% used angiotensin-converting enzyme inhibitors or angiotensin II receptor blockers, 41.6% used β-blockers, and 53.0% used statins. Compared with the referent group (estimated GFR ≥60 ml/min per 1.73 m(2)),
participants with estimated GFR <45 ml/min per 1.73 m(2) were more likely to use angiotensin-converting enzyme inhibitors or angiotensin II receptor blockers (adjusted prevalence ratio=1.14, 95% confidence interval=1.06-1.23), β-blockers (adjusted prevalence ratio=1.20, 95% confidence interval=1.09-1.32), and statins (adjusted prevalence ratio=1.10, 95% confidence interval=1.01-1.19). Antiplatelet agent use did not differ by estimated GFR category; 30% of participants reported medication nonadherence across all categories of estimated GFR.

**CONCLUSIONS:** Among participants with a history of cardiovascular disease, mild to moderate reductions in estimated GFR were associated with similar and even more frequent use of medications for secondary prevention compared with participants with preserved estimated GFR. Overall medication use and adherence were suboptimal.