RACIAL/ETHNIC DISPARITIES IN STROKE-PREVENTION AMONG PATIENTS UNDERGOING DIALYSIS

Study reveals that minorities are less likely to fill prescriptions for blood thinners

Highlights

- Among patients with kidney failure and atrial fibrillation, Black, Hispanic White, and Asian patients filled prescriptions of stroke-preventive medications less often than non-Hispanic White patients, and they were more likely to experience stroke.
- Equalizing the distribution of these medications would prevent 7%–12% of the stroke disparity among racial/ethnic minorities.

Washington, DC (February 20, 2020) — In a study of patients with kidney failure and atrial fibrillation, racial/ethnic minorities experienced higher rates of stroke compared with non-Hispanic White patients, and they were less likely to fill prescriptions of stroke-preventive medications. The findings, which appear in an upcoming issue of JASN, indicate that equalizing the distribution of such prescriptions may help address stroke-related disparities among patients.

Because patients with kidney failure and atrial fibrillation, or an irregular heartbeat, are at risk of developing strokes, they may benefit from taking blood thinners as a preventive measure. Prior studies of patients with atrial fibrillation, with or without kidney failure, have reported that minority racial/ethnic groups face a higher risk of stroke compared with Whites.

To investigate the potential causes of such disparities, a team led by Paul L. Kimmel, MD (National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health) examined information from a national registry of patients with kidney failure.

For the study, the researchers analyzed information from the United States Renal Data System to identify patients with kidney failure who initiated hemodialysis from 2006 to 2013, and then they identified those with a subsequent atrial fibrillation diagnosis and Medicare Part A/B/D insurance coverage.
Among 56,587 patients who were followed for one year, the number of strokes per 1,000 people were 84, 94, 97, and 102 in non-Hispanic White, Black, Hispanic White, and Asian patients, respectively.

Black, Hispanic White, and Asian patients filled prescriptions of the blood-thinner warfarin less often than non-Hispanic White patients, and they were more likely to experience stroke. Specifically, Black, Hispanic White, and Asian patients were 10%, 17%, and 28% less likely than non-Hispanic Whites to fill a warfarin prescription, respectively, and they were 13%, 15%, and 16% more likely to experience stroke. (The database did not provide information on whether patients were prescribed drugs, only whether they filled prescriptions.)

Analyses suggested that equalizing the warfarin distribution to that in the non-Hispanic White patient population would prevent 7%, 10%, and 12% of the stroke disparity among Black, Hispanic White, and Asian patients, respectively.

“Institutional features and medical choices may play key roles underlying differences between prescriptions received by members of different groups. Our estimates suggest equalization of prescription of warfarin, a relatively inexpensive anticoagulant medication, across all ethnic/racial groups would be associated with decreased stroke rates in Black, Asian, and Hispanic White patients on hemodialysis,” said Dr. Kimmel.

Study co-authors include Salina P. Waddy, MD; Allen J. Solomon, MD; Adan Z. Becerra, PhD; Julia B. Ward, PhD, MPH; Kevin E. Chan, MD, MSc; Chyng-Wen Fwu, DrPH; Jenna M. Norton, MPH; Paul W. Eggers, PhD; and Kevin C. Abbott, MD, MPH.

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