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RACIAL/ETHNIC DIFFERENCE IN MORTALITY ASSOCIATED WITH SERUM POTASSIUM IN MAINTENANCE HEMODIALYSIS PATIENTS Taehee Kim¹;

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Hyperkalemia is a life threatening and likely to occur in CKD patients. Potassium intake and excretion are different among race/ethnicity. We examined racial/ethnic differences in serum potassium among Whites, Blacks, and Hispanics undergoing maintenance hemodialysis (HD), and whether these racial/ethnic differences were associated with mortality.

In a 5-year (1/2007-12/2011) cohort of incident HD patients in the US, we assessed the racial/ethnic differences in serum potassium levels and mortality across Whites, Blacks, and Hispanics using cox proportional hazard up to 5 years.

We adjusted for covariates including malnutrition-inflammation markers as well as cardiovascular risk factors cachexia syndrome. Mean (± SD) age of overall

cohort at baseline was 62.7±15.1 years and mean serum potassium was 4.4±0.5 mEq/l. A total of 27,461 (26.9%) all-cause deaths were reported. Compared with the black patients with serum potassium >4.0 to ≤4.5 mEq/l as referent, white patients had highest mortality rate across all potassium levels in case-mix and MICS adjusted model. Hispanic patients with serum potassium >3.6 mEq/l were associated with lowest mortality rate among races. Mortality rates in Hispanic patients decreased along with rise in serum potassium levels.

Even though Hispanics tended to be more hyperkalemic than Whites and Blacks in patients who were initiating long term HD treatment, the survival advantage for Hispanics even with high serum potassium levels over Whites and Blacks clearly persisted.

