ELECTROCARDIOGRAM SCREENING MAY HELP PREDICT KIDNEY DISEASE PATIENTS’ RISK OF DYING FROM HEART DISEASE

Routine scans could help clinicians protect patients’ heart health

Highlight

• Certain electrocardiogram measures helped investigators identify a subgroup of individuals with chronic kidney disease who had substantially elevated risks of dying from heart disease.

An estimated 26 million people in the United States have chronic kidney disease, and heart disease is the leading cause of death in these patients.

Washington, DC (July 9, 2015) — Several common measures obtained from electrocardiograms (ECGs) may help clinicians determine a kidney disease patient’s risk of dying from heart disease. The findings, which are published in a study appearing in an upcoming issue of the Journal of the American Society of Nephrology (JASN), may be important for preserving kidney patients’ heart health.

ECG screening is not recommended for routinely assessing heart health in low-risk populations such as young athletes; however, would ECGs be useful in a higher-risk population such as those with chronic kidney disease (CKD), whose leading cause of death is heart disease?

To investigate, Rajat Deo, MD, MTR (Perelman School of Medicine at the University of Pennsylvania) and his colleagues evaluated whether a panel of 5 common ECG parameters could enhance prediction of CKD patients’ risk of dying over a median follow-up of 7.5 years.

Among 3587 patients in the study, 750 participants died. The researchers found that common ECG measures (PR interval, QRS duration, corrected QT interval, heart rate, and left ventricular hypertrophy) identified individuals with CKD who were at an especially high risk of dying from heart disease. “By enhancing the prediction of cardiovascular death in this population, we may find more effective and novel interventions to prevent the complications of cardiovascular disease,” said Dr. Deo.
Additional research is needed to evaluate whether treating patients who are found to be at especially high risk due to ECG screening will help to improve and prolong the lives of individuals with CKD.

Study co-authors include Haochang Shou, PhD; Elsayed Soliman, MD, MSc, MS; Wei Yang, PhD; Joshua Arkin, MD; Xiaoming Zhang, MS; Raymond Townsend, MD; Alan Go, MD; Michael Shlipak, MD, MPH; and Harold Feldman, MD, MSCE.

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Founded in 1966, and with more than 15,000 members, the American Society of Nephrology (ASN) leads the fight against kidney disease by educating health professionals, sharing new knowledge, advancing research, and advocating the highest quality care for patients.

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Facebook: Several common measures obtained from electrocardiograms (ECGs) may help clinicians determine a kidney disease patient’s risk of dying from heart disease. The findings, which are published in the Journal of the American Society of Nephrology, may be important for preserving kidney patients’ heart health.

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