

## CHRONIC KIDNEY DISEASE

## ECGs help predict risk of death in CKD

The standard 12-lead electrocardiogram (ECG) is a routine diagnostic test that provides a comprehensive overview of cardiac arrhythmias and conduction, but debate exists regarding its utility in low and intermediate-risk populations, such as those with chronic kidney disease (CKD). Now, findings from the Chronic Renal Insufficiency Cohort demonstrate that ECG measures are independent markers for risk of cardiovascular death in patients with CKD.

The investigators found that a prolonged PR and QT interval, wide QRS duration, and increased heart rate were independent risk factors for cardiovascular death, more so than for non-cardiovascular death or all-cause mortality. When these measures were added to a comprehensive model of cardiorenal risk factors, the prediction of cardiovascular death markedly improved.

“Our findings, along with the modest expense and widespread availability of electrocardiography, suggest that broader use of ECGs may positively

impact the care of the CKD population by permitting improved targeting of cardiovascular risk-reduction strategies,” says researcher Rajat Deo. “We now need to validate our findings in other populations, and evaluate the clinical effectiveness of ECG-based screening linked to targeted interventions.”

The researchers propose that clinical trials should evaluate whether the additional information gained from an ECG can identify subgroups that may benefit from additional cardiac work-up, and that improved understanding of the cardiac substrate might identify patients with CKD that would benefit from aggressive cardioprotective therapies, such as revascularization or insertion of an implantable cardioverter-defibrillator.

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