NEW MODEL PREDICTS WHICH PATIENTS WITH KIDNEY DISEASE MAY DEVELOP HEARTBEAT IRREGULARITIES

Highlights

- A new model that incorporates a type of artificial intelligence can accurately predict which individuals with chronic kidney disease face a high risk of developing atrial fibrillation.
- Results from the study will be presented online during ASN Kidney Week 2020 Reimagined October 19–October 25.

Washington, DC (October 24, 2020) — A new model that uses machine learning, which is a type of artificial intelligence, may help predict which patients with kidney disease are at especially high risk of developing heart rate irregularities. The findings come from a study that will be presented online during ASN Kidney Week 2020 Reimagined October 19–October 25.

Atrial fibrillation (AF)—an irregular, often rapid heart rate—is common in patients with chronic kidney disease (CKD) and is associated with poor kidney and cardiovascular outcomes. Researchers conducted a study to see if a new prediction model could be used to identify patients with CKD at highest risk of experiencing AF. The team compared a previously published AF prediction model with a model developed using machine learning (a type of artificial intelligence) based on clinical variables and cardiac markers.

In an analysis of information on 2,766 participants in the Chronic Renal Insufficiency Cohort (CRIC), the model based on machine learning was superior to the previously published model for predicting AF.

“The application of such a model could be used to identify patients with CKD who may benefit from enhanced cardiovascular care and also to identify selection of patients for clinical trials of AF therapies,” said lead author Leila Zelnick, PhD (University of Washington, in Seattle)

Study: “Prediction of Atrial Fibrillation Using Clinical and Cardiac Biomarker Data: The CRIC Study”
ASN Kidney Week 2020 Reimagined, the largest nephrology meeting of its kind, will provide a forum for more than 13,000 professionals to discuss the latest findings in kidney health research and engage in educational sessions related to advances in the care of patients with kidney and related disorders. Kidney Week 2020 Reimagined will take place October 19–October 25.

Since 1966, ASN has been leading the fight to prevent, treat, and cure kidney diseases throughout the world by educating health professionals and scientists, advancing research and innovation, communicating new knowledge, and advocating for the highest quality care for patients. ASN has more than 21,000 members representing 131 countries. For more information, visit www.asn-online.org.

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