CHRONIC KIDNEY DISEASE

ESRD risk in CKD patients with incident atrial fibrillation

Adults with chronic kidney disease (CKD) and incident atrial fibrillation are at increased risk of progression to end-stage renal disease (ESRD), say researchers. “These novel findings expand on previous knowledge by highlighting that atrial fibrillation is linked to a worse renal prognosis in patients with underlying kidney dysfunction,” explains researcher Nisha Bansal.

Previous studies have demonstrated that atrial fibrillation is prevalent among patients with CKD and that it increases the risk of stroke and death in these individuals; however, little is known about the effect of atrial fibrillation on renal outcomes. To determine the association between incident atrial fibrillation and risk of ESRD, Bansal and colleagues studied the development of incident atrial fibrillation and ESRD in 206,229 adults with CKD who did not have a previous history of atrial fibrillation or ESRD.

Over a mean follow-up of 5.1 years, 16,463 participants developed incident atrial fibrillation. After adjusting for patient characteristics, cardiovascular risk factors and medication use, the researchers found that incident atrial fibrillation was associated with a 67% increase in the risk of developing ESRD. This association was consistent across all patient subgroups, except for patients with baseline estimated glomerular filtration rate <30 ml/min/1.73 m².

The researchers now hope to identify possible mechanisms and modifiable pathways through which atrial fibrillation leads to higher risk of ESRD in patients with CKD.

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