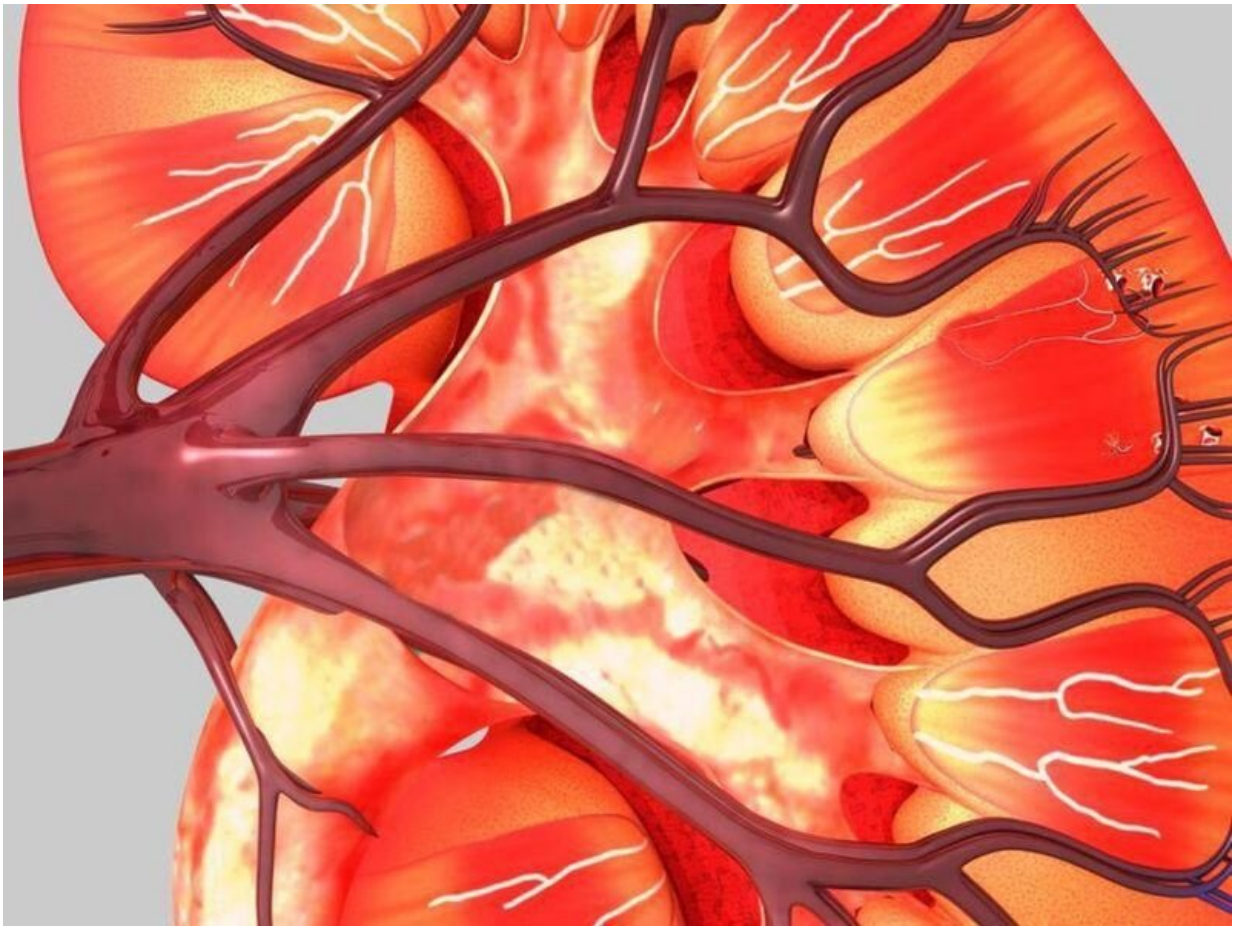
Pharmacomechanical thrombolysis for acute deep vein thrombosis tied to kidney injury

August 5 2021



(HealthDay)—Use of pharmacomechanical thrombolysis (PMT) for

treatment of acute deep vein thrombosis (DVT) is associated with a risk for acute kidney injury (AKI) that can progress to chronic renal failure in some patients, according to a study published in the July issue of the *Journal of Vascular Surgery: Venous and Lymphatic Disorders*.

Karim M. Salem, M.D., from the University of Pittsburgh Medical Center, and colleagues retrospectively reviewed medical records of 137 patients with acute DVT who had undergone PMT in a single institution from 2007 to 2018 to identify patients at the greatest risk for AKI after PMT.

The researchers found that 21.9 percent of patients developed AKI in the periprocedural period, one of whom required hemodialysis. Significantly greater rates of preoperative coronary artery disease, diabetes mellitus, dyslipidemia, and hypertension were seen among patients who developed AKI. Preoperative creatinine and glomerular filtration rate were similar between the two groups. Significant predictors of AKI included bilateral DVT (odds ratio, 4.35), single-session PMT (odds ratio, 3.05), and female sex (odds ratio, 2.85). Among the 30 AKI patients, 10 had normal renal function at discharge, 15 had normal renal function at the first follow-up visit, and 25 patients had normal renal function at subsequent clinical visits.

"Patients with bilateral extensive DVTs have a greater risk of AKI; thus, longer priming with a thrombolytic drip before PMT should be preferred for this population," the authors write.

Two authors disclosed financial ties to Boston Scientific, the manufacturer of the AngioJet system, a PMT device that was used to treat some of the patients included in this study.

More information: Abstract/Full Text

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Citation: Pharmacomechanical thrombolysis for acute deep vein thrombosis tied to kidney injury (2021, August 5) retrieved 20 April 2024 from https://medicalxpress.com/news/2021-08-pharmacomechanical-thrombolysis-acute-deep-vein.html

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