Catheter-directed, low-dose fibrinolysis safe, effective for PE

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(HealthDay)—Ultrasound-facilitated, catheter-directed, low-dose fibrinolysis appears safe and efficacious for acute massive and submassive pulmonary embolism (PE), according to a study published in the Aug. 24 issue of *JACC: Cardiovascular Interventions*.

Gregory Piazza, M.D., from Brigham and Women's Hospital in Boston, and colleagues conducted a prospective, single-arm, multicenter trial to examine the safety and efficacy of ultrasound-facilitated, catheter-directed, low-dose fibrinolysis using the EkoSonic Endovascular System. One hundred fifty patients with acute massive or submassive (31 and 119, respectively) PE were included. Tissue-plasminogen activator (24 mg) was administered as either 1 mg/hour for 24 hours with a unilateral catheter or as 1 mg/hour/catheter for 12 hours with bilateral catheters.

The researchers found that from baseline to 48 hours post-procedure, the mean right ventricular/left ventricular diameter ratio decreased (1.55 versus 1.13; P

"Ultrasound-facilitated, catheter-directed, low-dose fibrinolysis decreased right ventricular dilation, reduced pulmonary hypertension, decreased anatomic thrombus burden, and minimized intracranial hemorrhage in patients with acute massive and submassive PE," the authors write.

Several authors disclosed financial ties to pharmaceutical and medical device companies, including EKOS, which developed and manufactured the EkoSonic Endovascular System.

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