CASE STUDY

DR. TOD ENGELHARDT, MD, FACS
East Jefferson General Hospital, Metairie, LA

Submassive Bi-Lateral Pulmonary Embolism Resolved in 36-Hour Hospital Stay

Reduction of Right Ventricular Dysfunction After Treatment with EKOS® Acoustic Pulse Thrombolysis™

Patient History

- 47-year old female with history of diabetes presented to the ED with complaint of shortness of breath, poor appetite and weakness over last 4 weeks; returned to ED after progressive shortness of breath over last 3 days, followed by a syncopal episode at home.
- CT angiogram showed bilateral pulmonary embolism.
- Echocardiogram showed enlarged hypokinetic right ventricle with evidence of pulmonary hypertension.
- Ultrasound of the lower extremities showed peroneal vein DVT; no evidence of iliofemoral DVT.
- RV/LV ratio 1.7; PA pressure 55 mmHg; tachycardic; troponin 0.9.
- No prior history of DVT or PE.
- Received Lovenox and 1 dose of warfarin prior to procedure.

Treatment

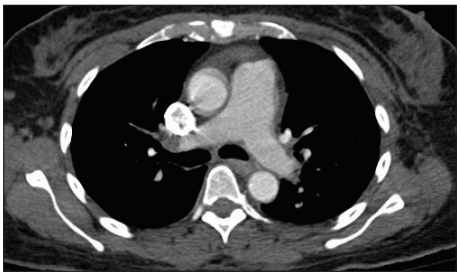
- Acoustic Pulse Thrombolysis™ treatment using a 12 cm EKOS® catheter placed via right common femoral vein into lower lobar branch of left pulmonary artery and similarly into lower lobar branch of right pulmonary using an 18 cm EKOS® catheter. Both catheters were 106cm working length.
- tPA drip 1 mg/hr for 12 hours along with the ultrasound and coolant.
- 1/2 day stay in ICU.

Results

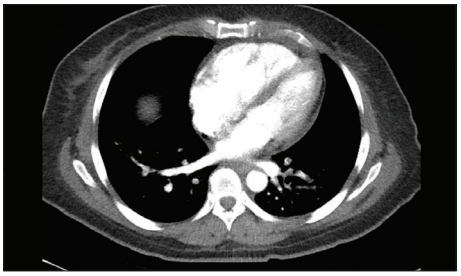
- RV/LV ratio reduced to 0.7
- Discharged in 36 hours in excellent condition and asymptomatic.

"We now have a safe and effective treatment for submassive and massive PE that shortens patient hospital stays."

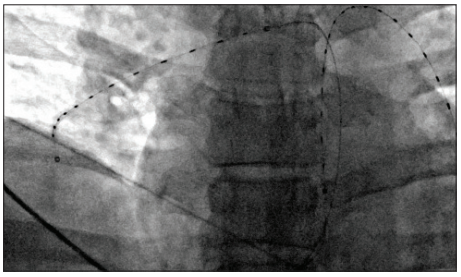
- Tod C. Engelhardt, MD, FACS



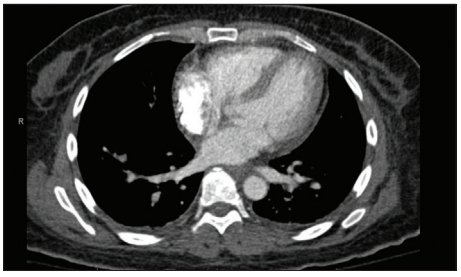
Pre-EKOS® treatment: bilateral PE



Pre-EKOS® treatment: RV/LV ratio 1.7



EKOS® Catheter Placement



8 hours Post-EKOS® treatment: RV/LV ratio 0.7

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EKOS CORPORATION
11911 N Creek Pkwy S.
Bothell, WA 98011