

Pulmonary Embolism and Patient Selection for ECLS

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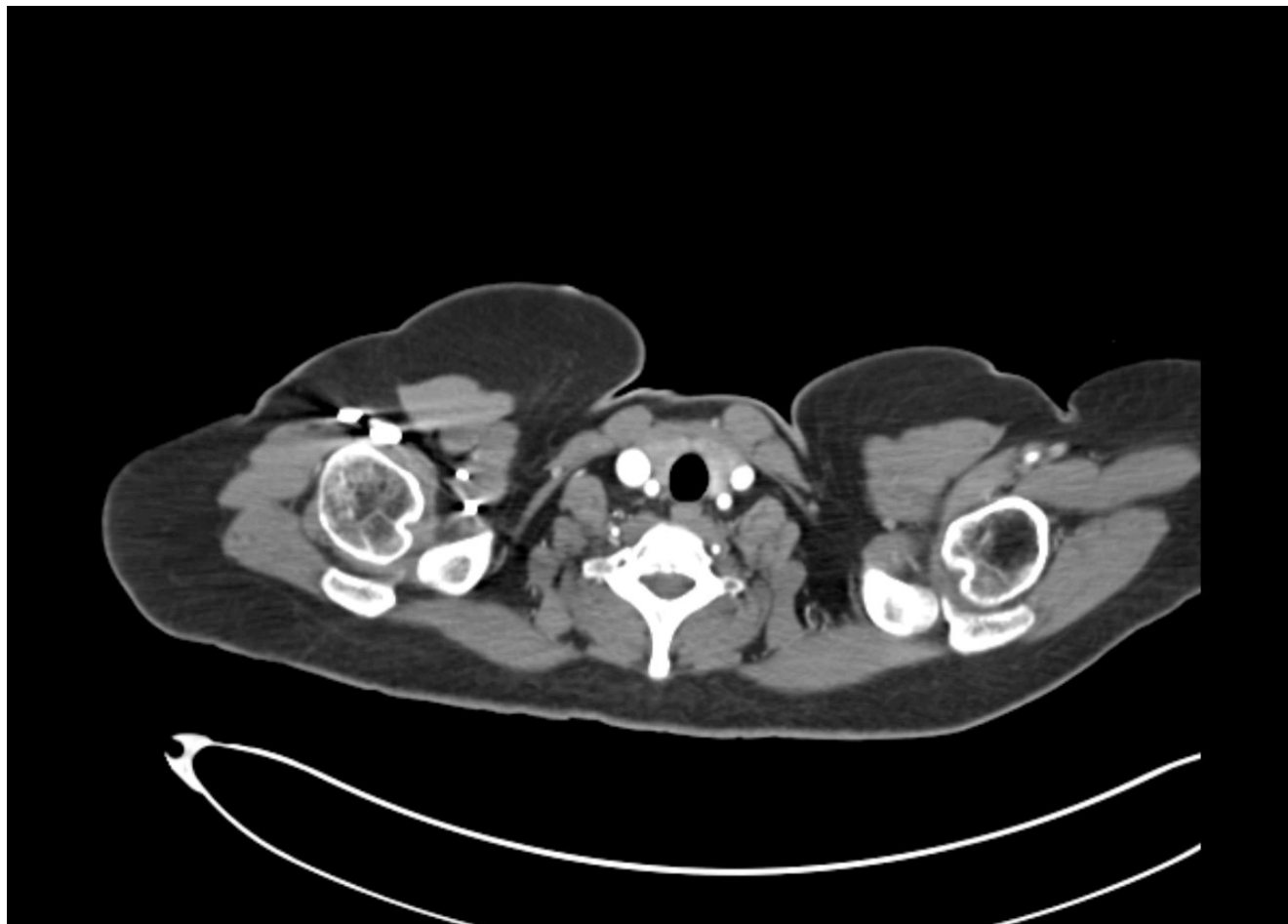
Disclosures

- Matthew R. Schill has no conflicts of interest to disclose.

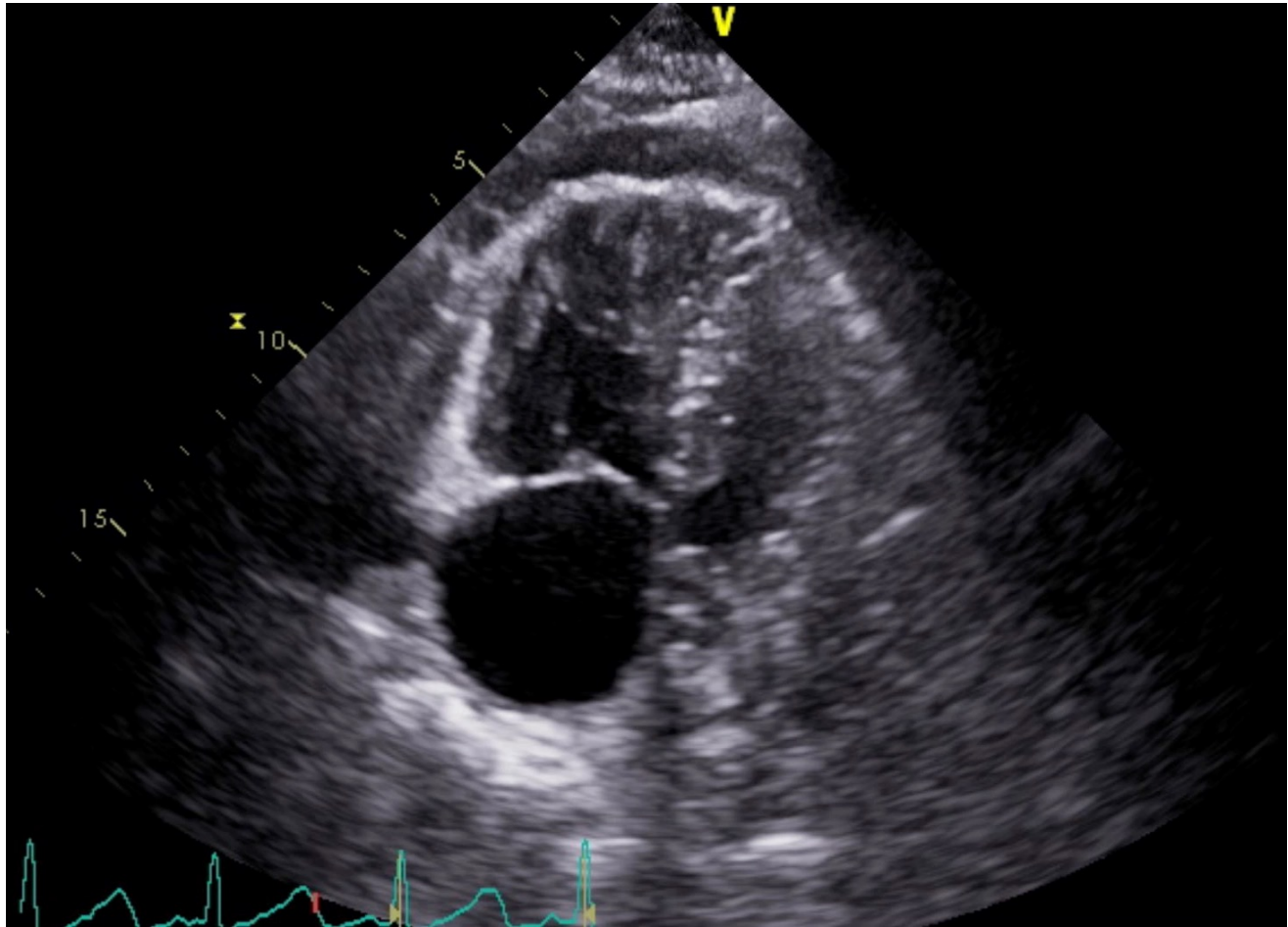
Case Presentation

- HPI – 33F presents to ED complaining of 1 week of generalized weakness, dyspnea, right-sided chest pain, right pelvis, hip and leg pain.
- PMH – bipolar disorder, current smoker
- Exam – tachycardic to 137, BP 115/54, RR 20, SpO2 100%
- Labs: WBC 13, Hgb 15, PLT 215, Cr 0.94, hsTnT 52 (3xULN), NT-proBNP 15,303, COVID/Flu negative. No ABG obtained.

CT



TTE



Options At This Point

- Anticoagulation
- Systemic thrombolysis
- Percutaneous thrombectomy

Hospital Course

- Patient refuses all intervention, medical or interventional, and is admitted to the hospital.
- Evening of hospital day 1, patient agreed to ICU admission, Pradaxa, and TPA
- Morning of hospital day 2, O2 requirements increased, patient accepts IV heparin
- Evening of hospital day 2, desaturation to 80's on monitor despite Optiflow, intubated, precipitating PEA arrest. ROSC after 4 minutes of ACLS. ABG 7.21/49/97/17. Intubated, started on A/C-VC 34/100/360/6 with Vt 433, MAP 13. Inhaled epoprostenol. Improves to 7.34/35/412/19 post intubation. Persistent sinus tach to 140's-150's.

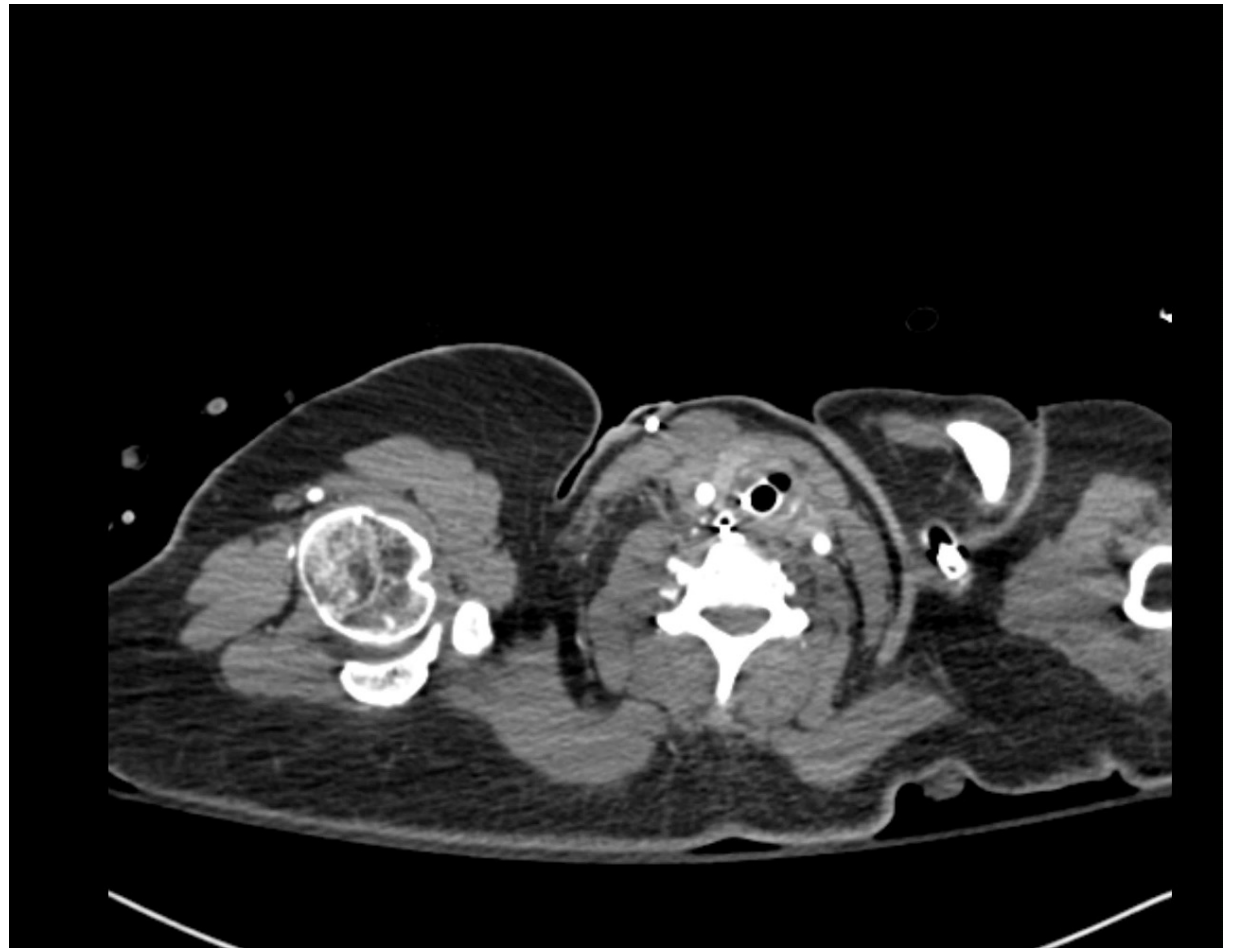
Options At This Point

- Anticoagulation only (s/p systemic thrombolysis)
- Percutaneous thrombectomy
- ECMO

Percutaneous Thrombectomy on ECMO

- Left CFA 15Fr (in 6.5 mm vessel)
- Left CFV 19Fr
- No distal perfusion cannula
- CentriMag, 2.5 L/min on 3500 rpm, FDO2 1, sweep 4 L/min.
- Thrombectomy with partial evacuation of thrombus in left, right and major branch pulmonary arteries – appeared chronic and organized.
- Transfer to tertiary center arranged.

Repeat CT



Hospital Course

- Day 3 – repeated unsuccessful attempt at thrombectomy
- Day 7 – repeat CT scan with decrease in clot burden and resolution of right heart strain
- Day 12 – decannulated. TEE with normal RV size and function.
- Day 15 – extubated
- Currently on room air, discharge planning.

Discussion