

ACUTE INTERMEDIATE-RISK PE CASE STUDY IN OBESE YOUNG PATIENT:

EKOS THERAPY WITH A LOW-DOSE OPTALYSE PROTOCOL

PHYSICIAN

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PATIENT HISTORY

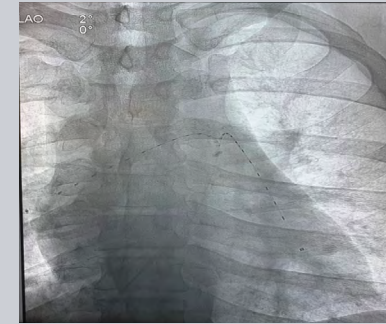
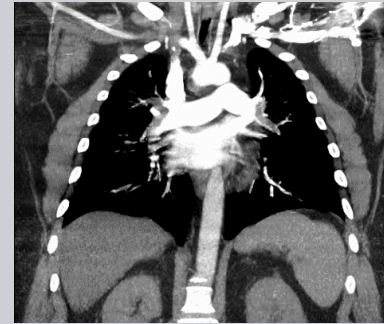
- 34 yo Caucasian male with BMI of 45 presented with history of sudden onset shortness of breath, worse with exertion; job requires patient to be physical
- No history of leg swelling or pain
- No previous history of DVT, PE, or hypercoagulable state
- Venous US: Thrombus within the mid/distal right and left SFV and popliteal vein
- PE: respiratory distress, pulse: 107, RR: 27, O2 saturation: 89% on 2LO2
- EKG: sinus tachycardia

DIAGNOSTICS

- Extensive bilateral PE
- RV/LV ratio: 2.0
- Signs of right heart strain including –
 - Deviation of the interventricular septum
 - Dilatation of the right ventricle
 - Dilatation of the main pulmonary artery

TREATMENT TECHNIQUE

- Trackability of sheaths in morbidly obese patient can be very difficult so mechanical thrombectomy not preferred as minimum sheath requirements are 12 Fr to 24 Fr
- EKOS treatment as per OPTALYSE Protocol - tPA infusion 1mg/hr x 6 hours in each EKOS catheter
- Procedure details:
 - Two 6 French sheaths placed in right common femoral vein with US-guided access
 - Easy trackability of two 12 cm EKOS catheters placed in the right and left pulmonary arteries
 - Pulmonary artery pressure: 46/12
- Enoxaparin 1mg/kg SQ q12 administered to patient during hospital course
- On following day, patient discharged on Apixaban



TREATMENT NOTES & OUTCOME

- Morbidly obese patient with bilateral intermediate-high risk PE can be treated with excellent safety and efficacy with significant cost savings to the hospital
- Trackability of EKOS catheters in dilated RV to LV make it an easy and durable option in morbidly obese patient
- Patient back to his work routine in 1 week
- EKOS Rx was performed as per OPTALYSE Protocol on this morbidly obese patient leads to
 - Ease of treatment
 - Low risk of complications
 - Reduced hospital length of stay
 - Early return to work



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