Case study – PE and DVT in a pregnant patient

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Disclosures

• Current
  • Medtronic – Consultant/ Speaker
  • Bard – Data Safety Committee
  • Cook – Consultant
  • Volcano – Consultant
  • Boston Scientific – Consultant/ Speaker

• Concluded
  • Synvaco – Director – Core Lower Extremity Wound Lab
  • GSK – Drug support only

Case Study

• 32 y.o. female
• 31 weeks pregnant
• H/O superficial phlebitis 2 weeks prior to admission
• Presents in transfer from outside hospital
  • Transient hypotension to 70 mmHg by doppler
  • Now BP – 106/60
  • HR – 115/ min
  • Significant shortness of breath – O2 sat 90% on 4 LNC
  • RR – 24/min
• Large saddle pulmonary embolus on CT scan
• Referred on IV heparin for Filter
• Duplex scan no DVT bilateral legs

PESI

• Simplified PESI – More than 1 – High risk
• Standard PESI –
  • 102 points
  • Class III, Intermediate Risk: 3.2-7.1% 30-day mortality

Saddle PE

• Possible left ovarian vein thrombus
• Common/proximal external iliac vein thrombus

CT run to pelvis

• Possible left ovarian vein thrombus
• Common/proximal external iliac vein thrombus
Pregnant with PE

What Next?

A. Full dose iv tPA – 100mg
B. ½ dose iv tPA – 50mg
C. Ultrasound accelerated tPA – 20-24mg
D. Bolus dose tPA delivered via catheter in the PA
E. Heparin/ LMWH and infra renal IVC filter
F. Heparin/ LMWH and supra renal IVC filter
G. DOAC and IVC filter

Supra-Renal IVC Filter

Pt course

• Premature labor 3 days later with birth
• Protein C deficiency found
• Returned at 5 weeks for removal of filter
Case Presentation
Diagnostic challenges in PE

Urgent page from the MICU
BS, MRN XXX, 67 yo M, LOC, AKI. Unstable for CT. Request pulm angio to prove and treat possible PE

History
- The patient is intubated
- Apparently the patient was found confused by a neighbor and brought to the ED
- Past medical history is unknown

Physical Examination
- Intubated and sedated
- Ventilated at a RR of 18 bpm
- HR 124, BP 80/40 on dopamine and norepinephrine, Temp 99°F
- Regular rate and rhythm; normal S1, S2; no murmurs, rubs, or gallops
- Lungs clear to auscultation bilaterally (anteriorly)

Preliminary lab work

D-Dimer 1451
Troponin T 0.4
BNP 751

Portable Chest X-ray
Bedside Lower Extremity Ultrasound

Bedside echocardiogram

What is Your Next Step?

A. Insist on a CT scan before starting anticoagulation and before even considering taking the patient to the cath lab
B. Take the patient to the cath lab as requested
C. Start anticoagulation but withhold invasive studies until PE can be proven by imaging
D. Administer systemic lytic therapy based on the available information