PULMONARY EMBOLISM

Epidemiology

- 90% achieve complete resolution
- 30% recurrence within 10 yrs
- 4-5% of acute PE develop CTEPH

Diagnosis

- Use clinical decision rues (Wells or Geneva) to categorize patients into a pre-test probability: P*E Likely* or *PE Unlikely*. PE likely gets at CTA. PE unlikely then gets PE rule out criteria (PERC rule). If PERC neg, nothing else to do. If PERC positive, then do D-dimer.
- CTA is gold standard for diagnosis
- Echo is complementary and provides prognostic info
- BNP and Trop are useful for prognostic info

Classification

High risk (Massive) = hemodynamic compromise (SBP < 90 for > 15 min)
Intermediate risk (Submassive) = HD stable but signs of RV strain by CT, Echo or biomarkers
Low risk = no HD compromise or RV strain

Treatment

- NOAC is AC of choice for VTE w/o cancer
- Lovenox if AC of choice for VTE w cancer
- Duration of AC for Provoked PE is 3 mo
- Duration of AC for Unprovoked PE is indefinite (until risk of bleeding is > risk of recurrence)
- Low risk PE, with no major comorbidities or contraindications to AC, good compliance can be treated out of the hospital
- Single Subsegmental PE, without DVT, asymptomatic and low risk of recurrence does not need to be AC
- Systemic tpa only indicated in High risk (massive)
- Catheter-directed tpa reverses RV strain quickly, but no mortality benefit reported yet
- IVC Filter only indicated in patients unable to tolerate AC