DVT POCUS: 1-pager

Indications
1. Concern for DVT (edema, calf tenderness, Homan’s sign, etc.)
2. Concern for PE

Probe Selection
1. Linear probe
2. Curvilinear probe can be helpful for obese or edematous patients

Technique/Views
Visualize at least three sites:
“Compress & slide distal 1cm, repeat”
1. Common femoral vein (medial to CFA)
2. (Superficial) Femoral Vein (medial to SFA)
3. Popliteal vein (superficial to pop artery)

Confirm patency (3 findings):
1. Compressible = Collapses before artery
   May need to direct pressure against bone to apply sufficient pressure
2. Anechoic
   Echogenic structure suggests thrombus.
   Fan transducer to differentiate artifact.
3. Flow
   Doppler signal suggests patency and distinguishes from non-vascular structures. Ensure transducer is angled toward or against direction of flow to enhance doppler effect.

Next Steps:
The impact of a DVT POCUS exam on the pre-test probability for a DVT, like any exam, is dependent on the quality of visualization and the provider’s proficiency with the exam.
If POCUS positive with clear visualization → Consider empiric anticoagulation while awaiting formal study

Pearls
- Elevate HOB (30°) or reverse trandelenburg improve lower extremity venous filling
- Compress with transducer perpendicular to the vessel
- Compress against a bone, not just against soft tissue
- Force of compression should not cause arterial deformation
- When using doppler, need to angle transducer slightly parallel to direction of flow

Pitfalls
- This test does NOT rule out calf DVTs or superficial VTs
- Lymph node: Can be confused for noncompressible vein; check by moving up or down 1 cm.
- Baker’s cyst: anechoic, no flow, difficult to compress
- Pseudoaneurysm: check for pulsatile flow

References: