ddxof: CT Interpretation Series

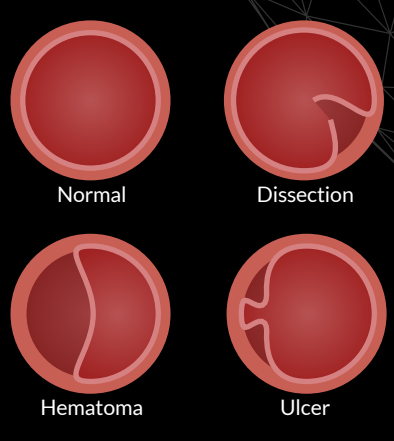
CTA
AORTA

Vascular Window
Axial Plane

CIRCULATION — 1

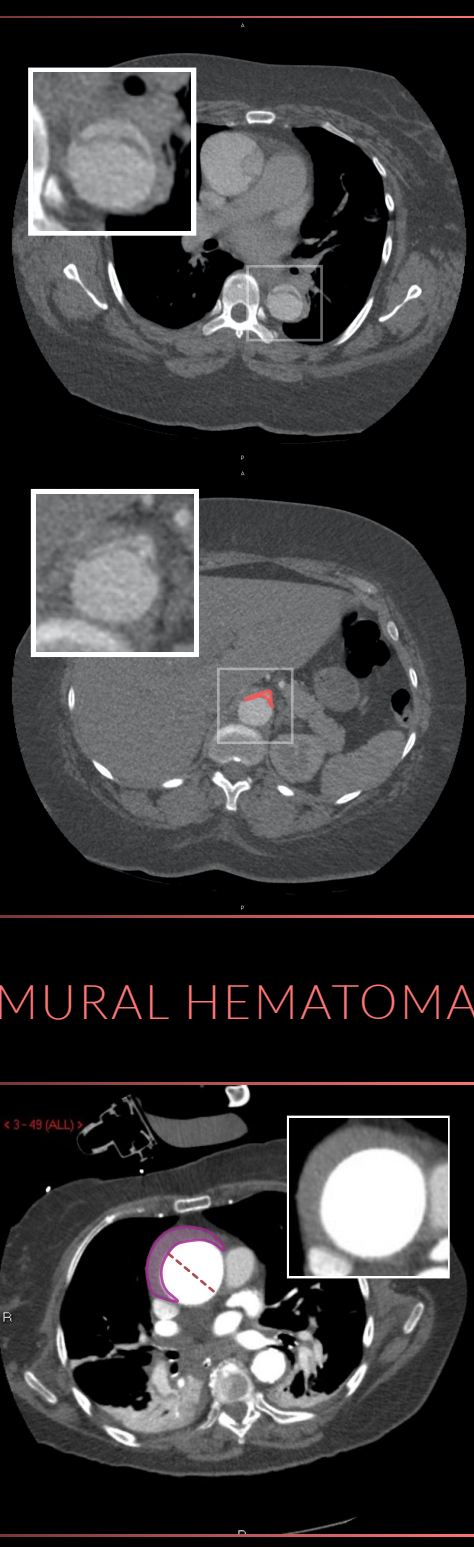
Look For:
- Aortic syndromes
  - Dissection
  - Intramural Hematoma
  - Penetrating atherosclerotic ulcer
- Central PE

Assess Quality:
- Ao > PA



DISSECTION

Evaluate:
- Origin and extent: Stanford classification
  - **A:** Ascending Aorta
  - **B:** Beyond Brachiocephalic
- True lumen: smaller, more dense, originates at aortic root
- Complications: hematoma, active extravasation



INTRAMURAL HEMATOMA

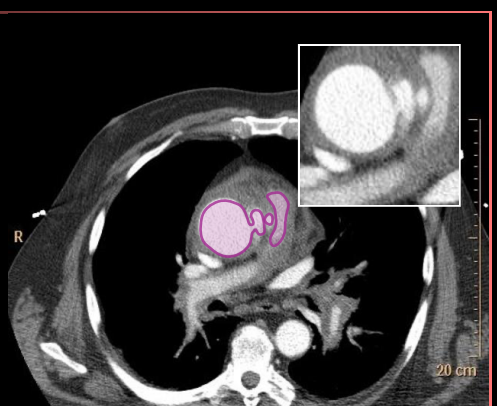
Look For:
- Crescent-shaped, low-attenuation relative to post-contrast aorta
- Precursor to aortic dissection

Aortic Root Dilation:
- Ectasia: 3.5-4.0cm
- Aneurysm: >4cm
- Rupture risk: >5cm

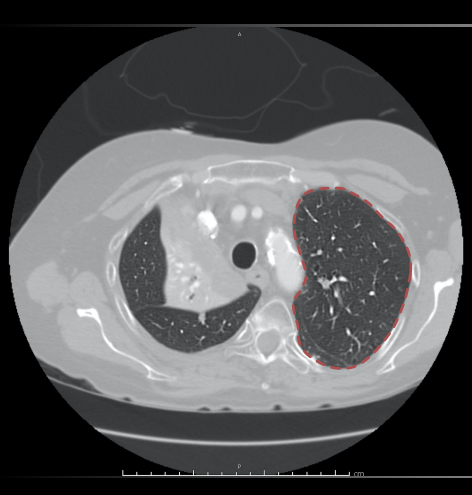
PENETRATING ATHEROSCLEROTIC ULCER

Look For:
- Contrast-filled outpouching
- May progress to perforation or dissection

Management:
Shared across aortic syndromes, impulse control and surgical evaluation



BREATHING — 3



Pleura:
- Pleural Line
- Pleural Potential Space
  - Pneumothorax
  - Pleural fluid
    - <20 HU simple fluid
    - >20 HU complex
    - >Hct HU blood

MEDIASTINUM — 4

SOFT-TISSUE — 5

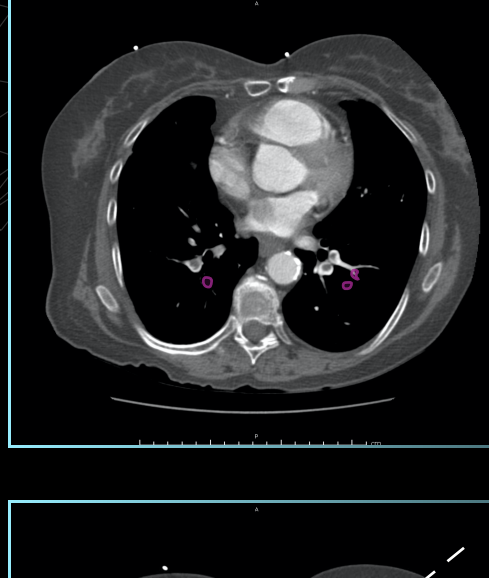
BONE — 6

VISUALIZED UPPER ABDOMEN — 7

CT PE
PULMONARY ANGIOGRAPHY

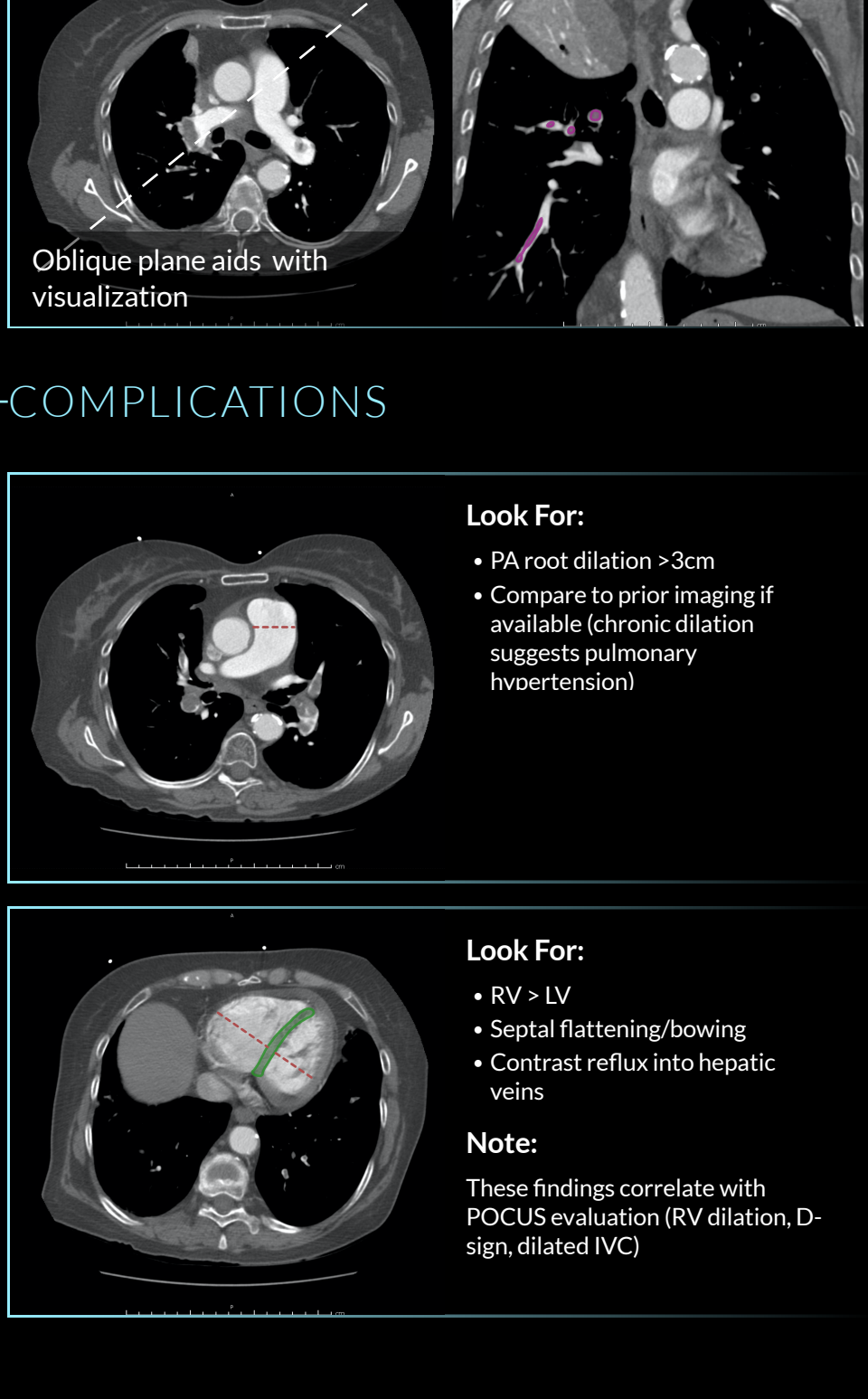
Vascular Window
Axial and Oblique Planes

CIRCULATION — 1



Look For:
- Filling defects
- Commonly occur at branch points

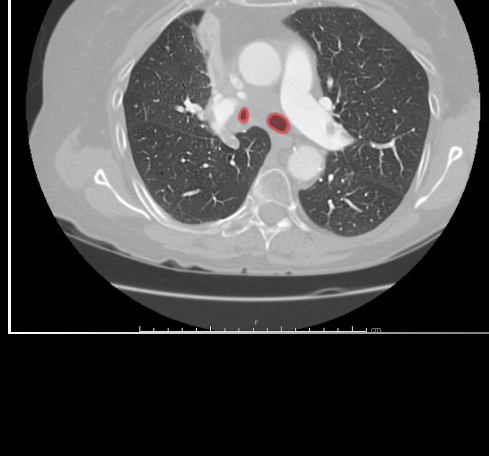
Assess Quality:
- PA > Ao
- PA > 20HU
- Contrast extends to subsegmental level



Oblique plane aids with visualization

COMPLICATIONS

Look For:
- PA root dilation >3cm
- Compare to prior imaging if available (chronic dilation suggests pulmonary hypertension)



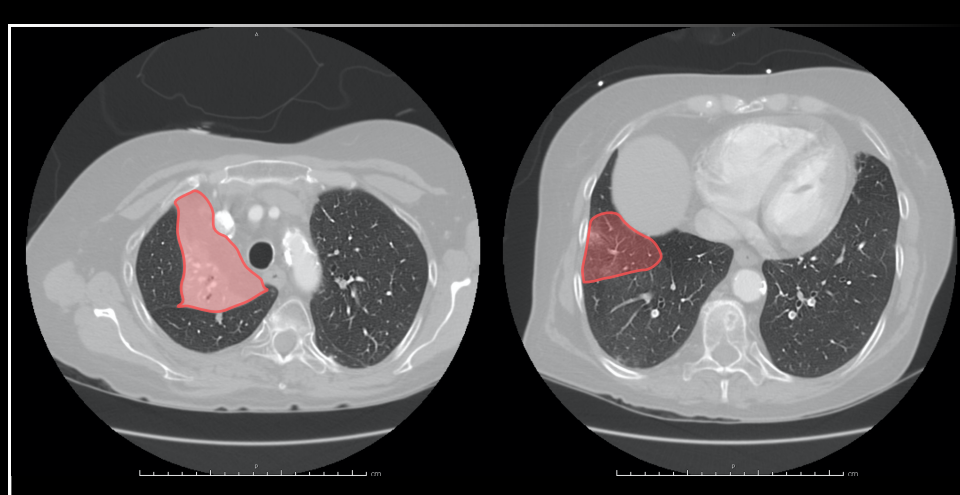
Look For:
- RV > LV
- Septal flattening/bowing
- Contrast reflux into hepatic veins

Note:
These findings correlate with POCUS evaluation (RV dilation, D-sign, dilated IVC)

Lung Window
Axial Plane

AIRWAY — 2

Look For:
- Patency of trachea and bronchi



Parenchyma:
- Atelectasis
  - Enhancing (densely vascularized, not aerated)
  - Volume loss, tightly-packed vessels and bronchioles

Parenchyma:
- Consolidation
  - Non-enhancing (vascular shunting)
  - Normal architecture