

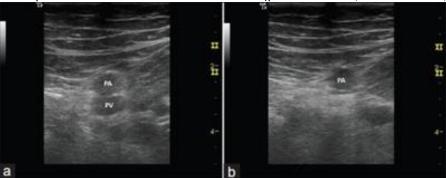
Race the Expert

Credits: Robert Stenberg, UNC/VCU/CCAG EM Residencies, FOAMed

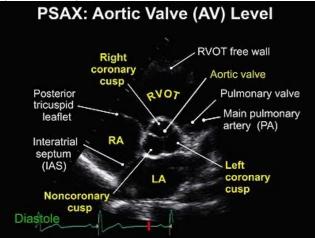
- Judge/Proctor: Some other U/S Expert
- Equipment
 - o Judge
 - Expert
 - 2 tables/gurneys
 - o 2 models
 - o 2 machines, towels, gel
 - Score sheet, writing utensil
- Game:
 - Judge calls out image which initiates scan
 - Judge makes call who gets image first
 - One person at a time scan, team can help find
 - o Rotate team member each time
- Points
 - 10 pts if beat expert
 - o 5 pts if able to acquire image
- ***Extra Time***
 - Review the cases
 - o Review the treatment
 - o Drop pearls
- 1. Popliteal vein
- 2. Parasternal Short Aortic View
- 3. Inferior epigastric vessels
- 4. Deep brachial vein/Brachial Vein
- 5. Lateral Edge Artifact
- 6. R iliac artery
- 7. Left renal vein
- 8. Site for ankle arthrocentesis
- 9. Hepatic vein pulsatility with PW Doppler
- 10. CBD
- 11. Sternoclavicular joint
- 12. Glenoid/humeral head articulation
- 13. Biceps tendon proximal insertion
- 14. Posterior acoustic enhancement
- 15. Thyroid Isthmus
- 16. Stomach
- 17. Reverberation Artifact



- 1. Popliteal vein
 - a. Behind knee, should be compressible,
 - b. Should be proximal to trifurcation of distal veins (posterior tibial, anterior tibial, peroneal)



- 2. Parasternal Short Aortic View
 - a. Great way to see entire RV Side
 - b. Assess for bicuspid or tricuspid aortic valve based on when valve is OPEN

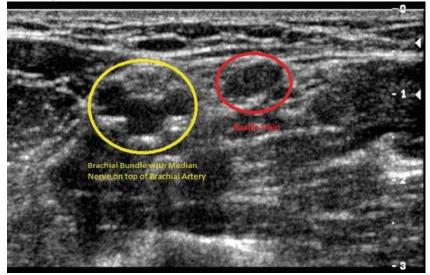


- 3. Inferior epigastric vessels
 - a. Need to watch out for while doing paracentesis
 - b. Runs lateral to midline





- 4. Deep brachial vein
 - a. Runs with artery and nerve so have to be more careful



- 5. Lateral Edge Artifact
 - a. Hits edge of curved surfac so no sound waves return past such
 - b. Gallbladder bladder achilles

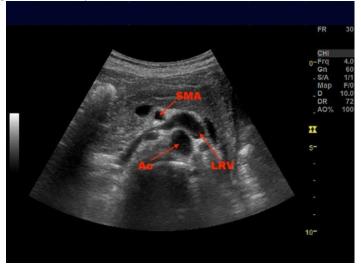


- 6. R iliac artery
 - a. Just distal to aortic bifurcation

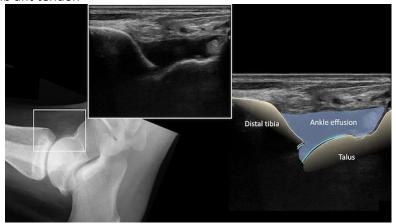




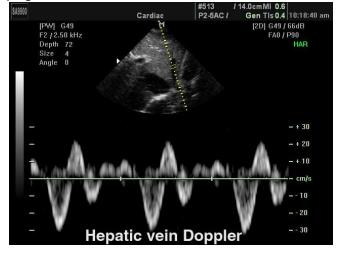
- 7. Left renal vein
 - a. Probably easiest to see on aorta view just deep to SMA.
 - b. Can also try to get on a kidney view but is harder



- 8. Site for ankle arthrocentesis
 - a. Medial to tib ant tendon

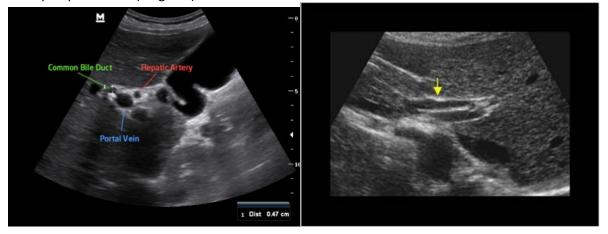


- 9. Hepatic vein pulsatility with Doppler
 - a. Should see it dumping into IVC

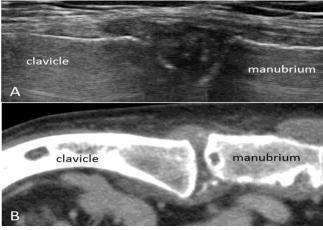




- 10. CBD
 - a. Should not see flow on color
 - b. LEFT ear of mickey mouse figure (short axis)
 - c. On top of portal vein (long axis)



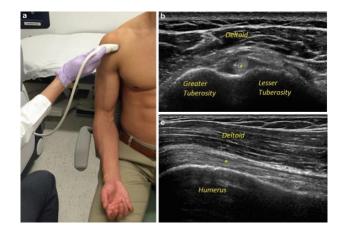
- 11. Sternoclavicular joint
 - a. Usually transverse axis
 - b. Usually if have effusion weird pathology or from IV Drug users doing pocket shots



- 12. Glenoid/humeral head articulation
 - a. Should be posterior, transverse, just inferior to scapular spine
- 13. Biceps tendon proximal insertion
 - a. Should be anterior shoulder running in bicipital groove, usually transverse orientation







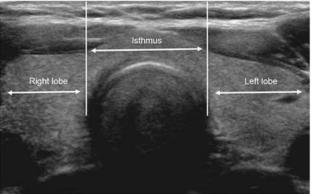
14. Posterior Acoustic Enhancement

- a. Seen with any fluid filled structure. Due to machine trying to autocorrect for attenuation but this happens less with liquids.
- b. Why you measure anterior wall of things as posterior wall can have falsely elevated measurements (e.g. gallbladder)



15. Thyroid Isthmus

- a. Thyroid looks like liver of the neck
- b. Midline along trachea should be able to see lobes on either side



16. Stomach

- a. Used in Anesthesia to assess for size of stomach/need for possible decompression before surgery
- b. May be seen in multiple views: LUQ or often liver tip along epigastric area to assess gastric antrum





17. Reverberation artifact

- a. Sound waves bounce between multiple reflectors
 - i. A lines in lung, pneumoperitoneum in belly
- b. Comet tail is a type of reverberation artifact
 - i. Adenomyomatosis

