

Minimal Requirements for Acceptable Scans

ABDOMINAL FAST

25 exams, 7 true positive studies (free fluid)

Show superior and inferior poles of kidney; clear interface between organs

- Hepatorenal aka Morison's Pouch
- Splenorenal
- Pelvic aka Pouch of Douglas (sagittal and transverse)

AORTA (5 views with measurements)

25 exams, 2 true positive studies (abdominal aortic aneurysm)

- Longitudinal (normal <3cm)
- Transverse (proximal, middle, distal)
- Transverse iliac bifurcation (normal <1.5cm)

BILIARY

25 exams, 12 true positive studies (cholelithiasis)

- Longitudinal gallbladder
- Transverse gallbladder
- Measure:
 - Anterior gallbladder wall thickness (normal <3mm)
 - Common bile duct (normal <6-7mm) with portal vein

CARDIAC FAST (Show 2 of 4)

25 exams, 2 true positive studies for effusion, 2 true positive for asystole

Show a clear pericardium-myocardium interface

- Subxiphoid (SX)
- Parasternal Long-Axis (PLA)
- Parasternal Short-Axis (PSA)
- Apical 4 Chamber (A4)
- Document asystole in M-mode

DEEP VENOUS THROMBOSIS (3 views)

25 exams, 7 true positive studies (deep venous thrombosis)

Show either complete or incomplete compressibility of the vessel

Show contralateral side for comparison when positive

- Common femoral vein
- Bifurcation of the superficial and deep femoral veins
- Popliteal vein
 - Color/spectral Doppler as supporting evidence

LUNG

25 exams, 2 true positive studies for pleural effusion, 2 true positive for pneumothorax

- Batwing pattern (rib-intercostal space-rib) for PTX
 - Document in M-mode: seashore vs. barcode sign
- Fluid above hemidiaphragm for pleural effusion
 - Document sinusoid sign in M-mode

RENAL

25 exams, 12 true positive studies (hydronephrosis)

Show the bladder if hydronephrosis is present

- Longitudinal of each kidney
- Transverse of each kidney

OB-GYN

25 exams of trans-abdominal, 12 true positive studies (intrauterine pregnancy)

25 exams of trans-vaginal, 12 true positive studies (intrauterine pregnancy)

Show a clear posterior cul de sac; show bladder/uterus interface

- Longitudinal uterus
- Transverse uterus
- Measure endo-myometrial mantle at its minimal thickness (normal ≥ 8 mm)
Document fetal heart rate in M-mode
Show adnexa in trans-vaginal scans

VASCULAR ACCESS

3 venous access exams, 2/3 central access

Show image of needle or wire within vessel lumen

SOFT TISSUE

5 true positive cellulitis

5 true positive abscess

- Show in 2 planes
- Show contralateral side for comparison when positive

INFERIOR VENA CAVA

3 exams

- B mode – measure 2 cm from entry into the right atrium
- M mode – measure max and min during respiratory cycle
- Calculate the Caval index: $(\text{max}-\text{min})/\text{max} \times 100\%$

BLADDER VOLUME

1 exam

- Bladder longitudinal and transverse
- Measure width, height and depth in cm
- Calculate the bladder volume: $(W \times H \times D \times 0.7 = \text{volume in ml})$ using machine software

OCULAR

5 exams, 1 true positive study (FB, retinal detachment, vitreous hemorrhage, lens dislocation)

- Globe in 2 planes
- Measure optic nerve sheath diameter, 3mm from the optic disk
- Show contralateral side for comparison when positive