

Live Scan Abdomen

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Stomach and Spleen

Stomach

- Position and size
- Gastric cycle
- Small: wait a 20-30 min, AFV, check esophagus and face/soft palate (equal sign = uvula)
- Large: wait 20-30 min, AFV, peristalsis, Check again >30 weeks (rare: duodenal obstruction)
- Gastric contents

Spleen

- Present? Absent in RAI
- Check splenic artery (celiac trunk) and vein (drains into left portal vein)
- Enlarged in metabolic disease, infection and anemia
- Hepatosplenomegaly can compress stomach
- Cysts?

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Bowel

Small bowel

- Echogenicity
 - Ascites
 - Calcifications
 - Content and caliber
 - Peristalsis
 - Cysts
 - Umbilical cord herniation
 - Watch out for proximal cord "cyst"
- = Small omphalocele

Large bowel

- Position and caliber
- Haustrae
- Peristalsis
- Content/caliber increases with GA and closer to rectum
- Beware of echolucent/black contents in late 1st trimester, early 2nd trimester: anal atresia, cloacal anomalies
- Enterolithiasis
- Target sign anus

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Diaphragm

- Check convexity of left and right hemidiaphragm
- Check movement of abdominal organs during breathing movements
 - Paradoxical breathing movements (organs move up into chest on ipsilateral side of CDH side and down on the "healthy" intact side)
- Stomach inferior to left hemidiaphragm?
- Stomach close to Bladder – small left CDH
- Isolated Rt pleural effusion - Rt CDH

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Liver and Gall bladder

Position and size

- Increased size in LGA, anemia, metabolic disorders
- Venous system:
 - Portal, intrahepatic umbilical vein draining into left portal vein/sinus
 - Ductus venosus: present, Doppler, absent: drainage to ? Check heart size, IVC caliber, MCA Doppler
 - Umbilical Vein Varix?
- Calcifications: location, serosal : check bowel

Gallbladder:

- Visible? Sometimes only visible in 3rd trimester
- Rare cause of non visible GB:
 - Cystic Fibrosis
- Enlarged: Trisomy?
- Gallstones normal
- Position relative to UV: to the left in case of PRUV: check for CHD
- Choledochal cyst?

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Adrenals-Kidneys

Just superior of kidneys

- Echolucent with thin echogenic medulla
- Mercedes Benz Star shaped
- Lying down, Discoid in renal agenesis or ectopia
- Echogenic mass :
 - Neuroblastoma, check liver
 - BPS (LUQ) extralobar, check feeding vessel

Number and position

- Measure kidneys in 3 dimensions
- Check Cortico Medullary Differentiation (CMD)
- Pelves, number and size, calyces visible, double collection?
- Renal arteries (coronal plane)
- Compensatory hypertrophy in case of unilateral agenesis
- Coronal plane to check for horseshoe/cross-fused kidney

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Bladder, ureter, genitalia

- Filled?
- Present?
- 3VC?
- Normal bladder but small/empty
 - Wait
 - Kidneys?
 - Placental cause (IUGR/TTTS)
- Normal but large bladder
 - Wait
 - Cycling
 - Kidneys and ureters
 - Obstruction? LUTO, large ureterocele, penis (megaloourethra)
 - Bladder wall thickness
- Genitalia:
 - Phenotype
 - Boy: hypospadias, megalourethra, testes
 - Girl: Uterus, hydrocolpos
 - Ambiguous: genotype? Adrenals?