

Procedure Name: Abdomen Complete

Updated 2/16/2023

Indications:

May include but not limited to abdomen pain, nausea and/or vomiting, gallbladder disease, palpable or suspected masses, pancreatitis, follow up to prior exam, abnormal liver function test values, or any other valid medical reason. There are no absolute contraindications.

General Description:

This is a survey of the upper abdomen. A complete examination of the abdomen for adults and children includes assessment and complete imaging of the liver, gallbladder and biliary tract, pancreas, spleen, aorta and IVC, and kidney(s) to include adrenal glands when possible. An assessment for intraperitoneal fluid and pleural effusion(s) should also be part of the examination.

Patient Preparation:

NPO after midnight for morning exam. For afternoon exam, the patient may have a low fat breakfast with no dairy products, prior to 7:30a.m.

Equipment Selection and Settings:

Select ABD from preset menu. A curvilinear 5.0MHz transducer will be used for most patients. The Sonographer should use the preprogrammed setting for the appropriate body part and adjust gain, depth and transmit zone settings to optimize images. Fill out any applicable impression or worksheet upon completion of exam.

Imaging Sequence:

The following imaging sequence is for a normal exam. Include additional images of pathology to demonstrate dimensions in three planes, texture, size, shape, and relationship to adjacent anatomy. Utilize color Doppler as needed to aid in the determination of any abnormality and to demonstrate blood flow.

1. Image patient data (demographics page)

SPLEEN

2. LONG Spleen with and without measurement
3. LONG Spleen/Lt kidney/adrenal
4. LONG Spleen medial, lateral
5. TRANS Spleen superior, mid, inferior

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LEFT KIDNEY

6. LONG LT kidney with length measurement
7. TRANS LT kidney mid with width and AP measurement
8. LONG LT kidney medial, mid, lateral
9. TRANS LT kidney upper, mid, lower

AORTA

10. LONG Aorta proximal
11. LONG Aorta mid
12. LONG Aorta distal
13. LONG or TRANS Aorta bifurcation

IVC

14. LONG IVC (annotation required)

PANCREAS

15. Pancreas head/body
16. Pancreas body/tail

LIVER

17. LONG LT lobe lateral
18. LONG LT lobe mid
19. LONG LT lobe liver to include IVC and Caudate Lobe
20. LONG RT lobe with portal vein
21. LONG RT Lobe liver/diaphragm
22. LONG RT Lobe liver/GB
23. LONG RT Lobe liver/RT kidney
24. TRANS LT lobe liver left hepatic vein
25. TRANS LT lobe liver left portal vein
26. TRANS LT lobe/caudate
27. TRANS RT lobe liver w/hepatic vein & IVC confluence
28. TRANS RT lobe liver/MPV
29. TRANS RT lobe liver/GB
30. TRANS RT lobe liver/RT kidney

RIGHT KIDNEY

31. LONG RT kidney with length measurement
32. TRANS RT kidney mid with width and AP measurement
33. LONG RT kidney medial, mid, lateral
34. TRANS RT kidney upper, mid, lower

GALLBLADDER

35. LONG GB lateral, mid, medial
36. TRANS GB neck, mid, fundus
37. TRANS GB with anterior wall measurement
38. LLD GB LONG and TRANS
39. CBD with and without measurement

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For patients with a diagnosis related to liver such as **elevated LFTs, hepatitis, chronic liver disease or cirrhosis**, the following images must be taken:

- a. Color Doppler of MPV to verify direction of flow. This should be taken at level of portahepatis and the color should never be inverted.
- b. Multiple images of the anterior surface of the liver using a high frequency linear transducer to show any nodularity of the liver surface.

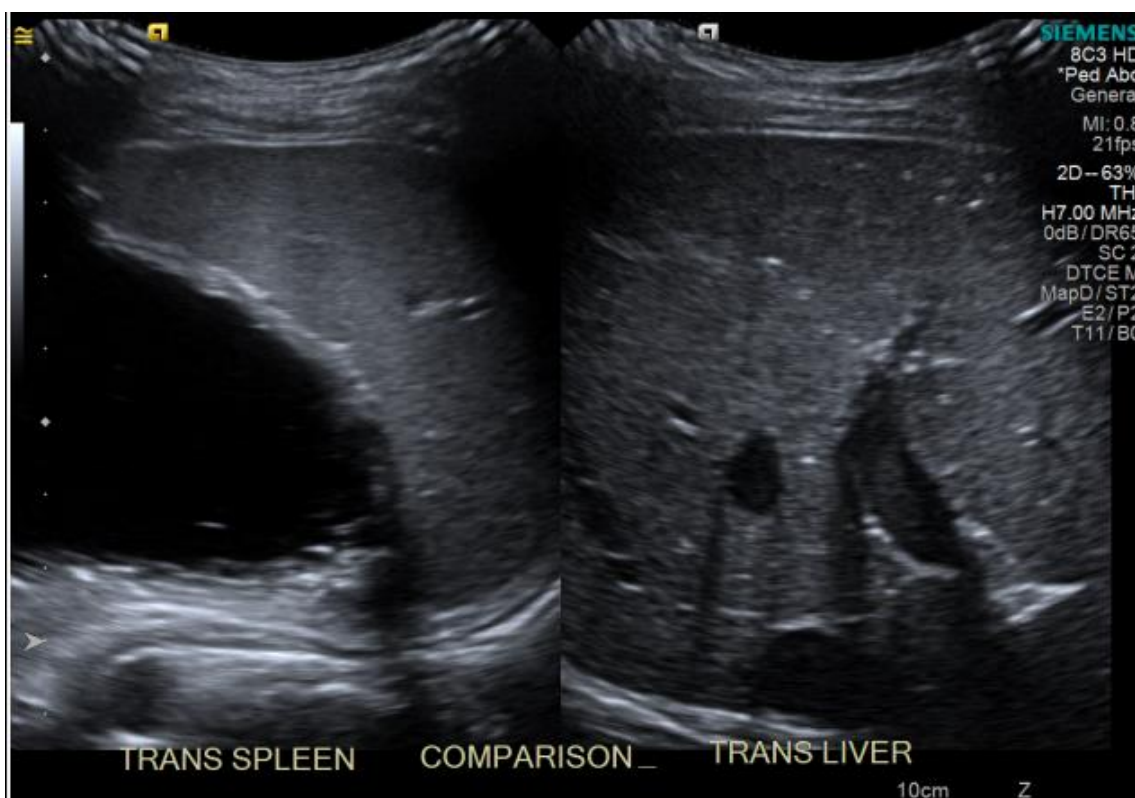
Pediatrics:

Must scan through the pelvis with a few documented images, Long and Trans and to include bladder, to rule out any cause for pain on ALL pediatric exams. No additional prep required.

For any abdominal exam that liver is imaged, must include a liver/spleen comparison image.

- a. Must be dual screen
- b. All settings must be identical for liver and spleen. Do not change any settings when moving between organs
- c. Images should be taken in transverse, filling the field of view with predominately splenic or right lobe liver tissue with only a thin rim of retroperitoneal fat posteriorly

Example of how image should be annotated and set up.....



Also need to provide patient height and weight for all pediatric patients having abdominal imaging.