# ABDOMEN ULTRASOUND LIMITED (RUQ, GALLBLADDER, LIVER)

Patient Prep (recommended):

- 1. Patients are recommended (including those who have had a cholecystectomy) to be NPO for 6 hours prior to an abdominal ultrasound examination.
  - a. If a patient has not been NPO (or tube feeding not stopped) for 6 hours, the technologist will scan the patients and document patient preparation.
  - b. Patients who are inadequately prepped may be required to undergo a second limited examination to view the organ that was unable to be imaged.
- 2. Patient may take water with medications up to exam time (small volumes only).

### Survey:

Perform a real-time survey of the abdomen with attention to Liver, Gallbladder and CHD/CBD.

Use Doppler or color flow to distinguish vessels and on any abnormalities.

### Image Documentation:

Each image must be labeled with the patient's full name, medical record number, accession number, initials of the imaging technologist, organ/area identification, scanning plane and patient orientation if different from supine.

If an image of a structure is not well seen, take an image of the structure and annotate the purpose of the image.

### General Procedure description:

- 1. The liver, gallbladder and CHD/CBD should be surveyed for abnormalities with real-time imaging. Representative images of normal organs in two planes should be obtained, usually in short and long axes.
- 2. The important vasculature of the organs should be examined and documented. It is advisable to document color flow of major vessels for patency.
- 3. Gallbladder wall thickness and CHD/CBD diameter are to be recorded.
- 4. The gallbladder must also be examined in the decubitus (LLD) or upright position.
- 5. Masses should be imaged in two planes with measurements in three orthogonal planes. Color flow images should be documented of any masses.

Guidelines for abdomen ultrasound:

## **LIVER**

- 1. Six long axis images thru the liver (to include the right and left lobe). Scan planes demonstrating the IVC, head of pancreas, the right kidney and main portal vein.
- 2. Six transverse or subcostal images thru the liver (to include the right and left lobe). Scan planes should include the main portal vein, its bifurcation, the hepatic veins and their confluence to the IVC.
- 3. One color flow images demonstrating patency of the main portal vein. One color flow images demonstrating patency of the hepatic veins and their junction with the IVC.

### **GALLBLADDER**

- 1. Three images long axis supine to include neck, body and fundus.
- 2. Three images transverse axis supine to include neck, body and fundus.
- 3. Three images long axis left lateral decubitus or upright to include neck, body and fundus.
- 4. Three images transverse axis left lateral decubitus or upright to include neck, body and fundus.
- 5. Transverse image of GB wall with measurement.
- 6. If GB removed two images showing GB fossa.

# **COMMON DILE DUCT:**

- 1. One image long axis of CBD/CHD with and without measurement.
- 2. One image transverse of CBD/CHD.

All color Doppler images should be with and without color.

All measurement images should be with and without measurement.

If organs cannot be seen or organ removed documentation should be noted on images and worksheet.

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