ABDOMINAL ULTRASOUND

A complete Abdominal US to be done unless an Enhanced Abdominal CT was performed in one month.

PANCREAS:

Transverse midline epigastric to evaluate long-axis of pancreas.

Evaluate head, uncinate process, body and tail.

Document distal CBD in pancreatic head if seen.

Measure pathology in both long and short-axis.

Orally administer water for better visualization of pancreas if needed.

IVC:

Longitudinal at midline epigastric level.

AORTA:

Longitudinal PRX (below diaphragm, near the celiac artery)
MID (near level of renal arteries)
DISTAL (just above iliac bifurcation)

If presence of an aneurysm ($\geq$ 3 cm) document location, i.e., supra or infrarenal. Measure AP diameter in long-axis (outer edge to outer edge). Transverse or coronal views should be obtained to measure width.

If specific aorta exam is requested see AORTA ULTRASOUND protocol.

LIVER:

Image LONG and TRANS views of left, caudate, and right lobes.

Demonstrate hepatic veins and left, right and main portal vein.

Assess liver for echogencity, size, masses, surface contour and echo texture (cirrhosis).

Compare liver echogencity with that of right kidney.

Measure and document location of hepatic masses/cysts in LONG and TRANS views.

Document hepatomegaly by measuring right lobe in LONG at midclavicular line.

Assess and image right hemidiaphragm and right pleural space.

Image MPV with color Doppler in **ALL** cirrhotic and/or Hep C patients.

ABDOMINAL ULTRASOUND con't

GALLBLADDER & BILIARY TRACT:

Longitudinal of GB in supine position.

Image LONG and TRANS views in left lateral decubitus imaging GB neck, body and fundus. Additional patient positions such as erect, prone, etc. may be necessary when evaluating mobility of gallstones.

Measure GB wall if thickened.

Report on tech worksheet whether positive or negative Murphy's sign on every *abnormal* GB.

Longitudinal and measurement of bile duct in the porta hepatis.

If possible document distal CBD in pancreatic head.

Assess and image if intrahepatic ductal dilatation is present. Color Doppler can be used to differentiate hepatic arteries and portal veins from bile ducts.

KIDNEYS:

Image Longitudinal LAT, MID, MED or Coronal POST, MID, ANT aspect of both kidneys.

Measure maximum length of each kidney.

Image TRANS SUP, MID, INF pole.

Compare and image renal echogencity to liver or spleen.

If hydronephrosis is present, assess and image bladder for obstruction. Use color Doppler to evaluate for bilateral ureteral jets.

SPLEEN:

Image Longitudinal/Coronal and Transverse spleen.

Measure splenic length if suspect splenomegaly.

Compare and image echogencity with that of left kidney.

If possible demonstrate left hemidiaphragm and left pleural space.

Spleen only to "r/o splenomegaly" (Limited Abd exam) can be done on patients who have a history of mononucleosis.