Clinical Protocol

Liver Transplant

1. Aorta long with AP measurements prox, mid, and dist
2. IVC
    - Grey scale image with measurement if larger than 3.75cm.
    - Spectral Doppler waveform and velocity measurements within the native and donor IVC.
3. CBD with measurement at portahepatis and head of pancreas.
4. Liver
    - Grayscale images of entire liver in long and trans
    - Spectral Doppler waveforms with velocities and RI in the native and donor main hepatic artery.
    - Spectral Doppler waveforms with velocities and RI in the right and left Hepatic arteries.
    - Angle corrected Spectral Doppler waveforms with velocities in the native MPV and distal to the anastomosis with a ratio calculated.
    - Spectral Doppler waveforms with velocities in RHV, MHV, RHV, RPV, and LPV.

Renal Transplant

1. Use Renal/Retroperitoneal Protocol to evaluate kidneys.
2. Add standard greyscale images of transplant kidneys.
3. Spectral Doppler waveforms with velocities, AT, and RI acquired for all renal arteries proximal and distal to anastomosis and anywhere spectral aliasing seen.
4. Spectral Doppler waveforms with velocities along renal vein proximal and distal to anastomosis.
5. Color and Spectral Doppler waveforms with velocity measurements in iliac artery and vein superior to anastomosis. Calculate renal artery to iliac artery ratio.
6. Color Doppler images of entire kidney to show perfusion and vascular anomalies.
7. RI and AT shown for interlobar or segmental arteries in UP, MP, and LP regions.
8. Spectral Doppler waveforms of intrarenal veins.

Pancreas Transplant

Evaluation of transplant pancreas difficult exam with many variations and variables. Consult AIUM guidelines to work through that evaluation.